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A Method for a Compensated Wage By Index Numbers

By L. K. Comstock

No problems confront us oftener than those arising from the relation of employer and employee. In fact, this relationship is probably the most important one that engages the attention of the business and industrial world and transcends in importance the problems now being solved on the battle-fields of Europe, although perhaps inextricably mingled with those problems.

We as citizens of the United States, whether we belong to the ranks of labor or the employers of labor, have been derelict in our duty, because we have negligently or deliberately refused to look intelligently into this problem, to seek out the facts of human nature involved and to be guided by what could have been found. The prejudices and traditions of the past still linger to make the employer look upon labor not in the spirit of coöperation, but in the spirit of the master toward the servant. On the other hand, centuries of tradition and prejudice have made the laboring man, the mechanic, look upon his employer as a man to be feared and hated. He has had perhaps a just cause for his servile attitude. But in these modern days of democracy and unions, he has felt his strength and has endeavored to obtain by force what he thought he wanted and could get, because he knew no other way. There have been many exceptions, of course, to the general rule,

and many employers for generations have had the best of relations with their employees. But neither employers nor employees have been fully conscious of their respective obligations to each other and in time the old problems confront them.

Not much conscious effort has been expended on the solution of these problems for the purpose of realizing predetermined results. Only by striving for the impossible may we attain the possible.

I think it may be stated without fear of contradiction that these problems taken in the mass have drifted toward temporary or opportunist solution rather than yielded to the power of reason and logic. Most labor disputes in the past have been tinged with anger on one side or the other and generally on both sides; or they have been regarded as sporting events in which the contestants have played for the stakes for sheer love of the game. A labor dispute hardly rises to the dignity of the term unless accompanied by a strike or a lockout. In either of these cases both sides lose, a circumstance readily producing anger, and therefore usually an unjust settlement, or divesting the game of its sporting character.

In discussing "war and human progress," Viscount Bryce points out the distinction between two schools of philosophical thinkers or historians. One of these schools emphasizes "the power of reason and of those higher and gentler altruistic emotions which the development of reason as the guide of life tends to evoke and foster," and finds in these tendencies "the chief sources of human progress in the past and expects from them its further progress in the future." This school regards men "as capable of a continual advance through the increasing influence of reason and sympathy" and dwells upon "the idea of justice and right as the chief factors in the amelioration of society."

The other school, less optimistic, insists "on the power of selfishness and of passion, holding these to be elements in human action which can never be greatly refined or restrained, either by reason or by sympathy," that "social order can be secured only by force—right itself can only be created by force," and that "it is past force that has made what men call right and law in government."

The tendency of this second school is "associated with the less rational element in man—with passion and the self-regarding impulses which naturally attain their ends by physical violence."

The conflict between these two philosophies which Bryce finds is the fundamental provocative of the great world war, thoughtful persons find also is the fundamental provocative of industrial conflict.

Boiled down, these two schools of thought can be described as *the forward looking* and *the reactionary schools*: the former builds on faith and the latter constructs its edifice out of the old materials of the past.

You have all known the employer who could see nothing good in unions and whose pessimism in regard to his relations with labor was not only depressing to himself but to all those who came within the sound of his voice. You have all known the swaggering, bullying labor delegate whose only weapon was a strike, or threat of strike, not to speak of anything having a long green background.

The modern steel frame building is a product of vision and faith; the four-story composite of wood and brick is the heritage of the past. Democracy is the product of vision and faith: monarchy is the heritage of the past. The conference club is the product of faith: senseless, blind and vicious competition is our heritage of the past.

I cannot do better here than to quote the words of President Wilson when speaking to the convention of the American Federation of Labor at Buffalo last November:

> Now to "stand together" means that nobody must interrupt the processes of our energy, if the interruption can possibly be avoided without the absolute invasion of freedom. To put it concretely that means this: Nobody has a right to stop the processes of labor until all the methods of conciliation and settlement have been exhausted, and I might as well say right here that I am not talking to you alone. You sometimes stop the courses of labor, but there are others who do the same. And I believe that I am speaking of my own experience not only, but of the experience of others, when I say that you are reasonable in a larger number of cases than the capitalists.
>
> I am not saying these things to them personally yet, because I haven't had a chance. But they have to be said, not in any spirit of criticism, because I would like to see all the critics exported; but in order to clean the atmosphere and come down to business, everybody on both sides has got to transact business, and the settlement is never impossible when both sides want to do the square and right things. Moreover, a settlement is always hard to avoid when the parties can be brought face to face. I can differ with a man much more radically when he isn't in the room than I

can when he is in the room, because then the awkward thing is that he can come back at me and answer what I say. It is always dangerous. We must insist in every instance that the parties come into each other's presence and there discuss the issues between them, and not separately in places which have no communication with each other.

After incalculable losses, to both employer and employee through many years, by reason of strikes and lockouts, it would seem that the time had arrived for these two parties to apply to their differences some degree of intelligence, common sense and sympathy. The union mechanic cannot get along without his employer, nor can his employer get along without his mechanics. This being so, why is it not the part of common sense to admit it frankly and work peaceably in team harness? Let both the employer and employee make a virtue of necessity. Let the employer study sympathetically the needs and requirements of his men, and likewise let the union see to it that the men work faithfully and sympathetically for their employers.

In the January, 1917, number of *The Annals* of the American Academy of Political Science, Leo Wolman discusses the growth of unionism in the United States and divides trade union labor into three classes, according to the extent to which the trades have unionized their ranks. If the electrical trades, for instance, are classified under the general heading of building trades, then they are but 16 per cent. unionized; if under the heading of electric light and power, then but 14 per cent. unionized. If the International Brotherhood of Electrical Workers would consult its own best interests in an intelligent effort at coöperating with the employers, it would make a more determined effort to unionize more than 16 per cent. of the craft.

This should have been done in normal times, but now the necessity is even more apparent. The method of recruiting lies obviously in treating the apprentice question more liberally by making the inducements more attractive for apprentices passing to the grade of helper; and then passing the helpers along with fewer obstacles to the grade of journeyman.

One of the principal indications of an impending shift in the front of the labor movement in this country is found in the fact that many of labor's foremost spokesmen admit that in increased production lies one of the most hopeful routes to a higher social and economic status for those who work with their hands. In several recent reports—largely influenced by the American Federation of

Labor—where this question of the effect of increased production was distinctly raised, labor's representatives refused to oppose increased production as such. This is a far step from the "soldiering" recently openly advocated and practised.

It may be argued that trade union activity in the direction of curtailing output, restrictions on apprenticeship and its successful demands for shorter hours has made a real contribution toward increased cost of living. This argument is generally believed by certain classes of employers. Let us examine the available data on this subject. The federal bulletin on wholesale prices in 1913 cites twelve important food, fuel and shelter articles, which on the average showed a price range for the year 1913 over sixty per cent. higher than their price range for the period from 1890-1899. The whole 252 articles listed in the bureau's bulletin showed a price rise for the same period of only thirty-five per cent. It should be stated that eleven of the twelve articles above mentioned were produced by farmers, ranchers, timber men and oil workers. These groups of workers are not organized into unions, and yet the commodities they produced show a price rise 70 per cent. greater than that of average goods. Apparently organized labor exactions do not account for this great rise in eleven staples.

The general federal report on wages published in 1908, covered wages for 1907 and preceding years. This report covered 350,758 workmen, including highly organized groups, such as the building trades (45,537), the marble and stone cutters (5,316), the printers (14,461) and the foundrymen and machinists (27,612). It included also 28,179 municipal workmen. This report showed that the average full time weekly wages of these 350,758 workmen were, in 1907, 22.4 per cent. higher than the wages for similar work had been on the average for the period 1890-1899. The report also showed that the average working hours per week had decreased five per cent. between the average for 1890-1899 and 1907. Allowing for this decrease in weekly hours, it appears that average hourly wage increase was 28.8 per cent. But the staples above cited had during the same period increased over 50 per cent. in price above their prices in the nineties. If the activity of organized labor were the sole cause of the average rise in wages of 22.4 per cent. weekly for this great representative body of workmen, it would be difficult to see any

causal connection between a 22.4 per cent. rise in wages and a 50 per cent. rise in prices; especially when we take into consideration that labor constitutes but 18.6 per cent. of the total reported expense of production, and that an average rise in wages since the nineties of even 40 per cent. would mean an increase of less than 8 per cent. in production expense.

The great trouble seems to lie in the fact that collective bargaining is conceived in terms of unionism, closed shop and walking delegates, and there does not seem to be a comprehension of the fact that a compromise exists which will safeguard the rights of the employer and worker without injustice to either.

Speaking of the Chicago clothing strike in 1915, Mr. Schaffner said:

> Industrial peace will never come so long as employer or employee believes he is being deprived of rights honestly belonging to him. Arbitration and conciliation should be applied to all departments of business wherever there is a conflict of interests. It ensures exhaustive discussion of every matter of importance, gives everybody a chance to express his opinion, brings to light valuable suggestions, and makes possible a higher degree of co-operation and team work.

Union leaders have expended their energies in the past, ostensibly at least, to gain higher wages and better working conditions. Employers have with the greatest reluctance yielded in these two sets of demands when their intelligence should have dictated an early and willing acquiescence. By this statement, I do not mean to imply a servile acceptance on the part of the employer of any demand; but I do wish to convey the idea that if the employer had earlier recognized the right of employees to unionize—had earlier perceived that the time had come or was at hand when public opinion would support the union demand for a larger and a fairer share in the fruits of his laber—union labor would have naturally cultivated a more sympathetic attitude toward employers, and the dishonest labor leaders would have been robbed of their opportunities for grafting—opportunities provided many times by those very employers who have cried out most loudly against the practice.

We talk of open shop and closed shop as though we were entitled to choose under which emblem we desire to conduct our operations. In a limited sense we have this right, but it is well to bear in mind that the right of the employees to strike for any cause or for no cause is sustained by the common law everywhere

in the United States, and that agreements among strikers to take peaceable means to induce others to remain away from the works of an employer until he yields to the demands of the strikers are not held to be conspiracies under the common law, and the carrying out of such a purpose by peaceable persuasion and without violence, intimidation or threats is not unlawful. Many of the labor disputes which have reached the courts have been decided according to the common law; but twenty-three states and the federal government have laws or constitutional provisions for arbitration and conciliation, although the federal statute applies only to common carriers engaged in interstate commerce. Reference to these legal phases of the subject is made only to direct attention to the very considerable efforts which have been made toward settling disputes without recourse to the courts.

Much of our trouble with labor has arisen from that ever-recurring attempt to adjust the wage question. I think it within the limits of truth to say that this question is rarely if ever settled equitably. It is settled usually only after a strike and protracted negotiations, and then without any particular reference to the equities of the case. The side on which the ablest or most stubborn negotiators sit wins. Such settlements are innocent of scientific considerations or adjustment and the hidden designs of the negotiators cannot stand the test of daylight.

It can well be admitted that labor is constantly demanding higher wages. The employer as constantly resists. One or the other must give way or a deadlock ensues and bitterness, perhaps violence, results, with loss to all concerned. A just and scientific consideration of the facts should point the way to any readjustment of wages. Is it not worth while and certainly expedient to inquire, when wage readjustment is demanded, whether or not the facts support such a readjustment?

Wage earners must receive something more than the cost of their support, because if this were not so, it would be impossible for them to bring up families and the race of such workmen would not outlast a generation. It would appear then that the employer from purely selfish motives must take intelligent cognizance of the relation between cost of living and rate of wages. As the cost of living rises, the rate of wages must advance with equal increments, in order to maintain the relative position in the eco-

nomic world of the wage earner. No one will deny the correctness of this theory—it remains then to find a practical method of its application.

For many years the practice has been common of tracing general commodity price tendencies and reducing them to a common number called an index number. This index number is indicative of general tendencies and takes due account of both the simultaneous rise and fall of different commodity prices and their proper weighting. There are several institutions producing these index numbers monthly, and they are in general agreement, although developed in different ways. Such index numbers are calculated by the London *Economist,* London *Statist,* Bradstreet, United States department of labor, Gibson, Babson and others.

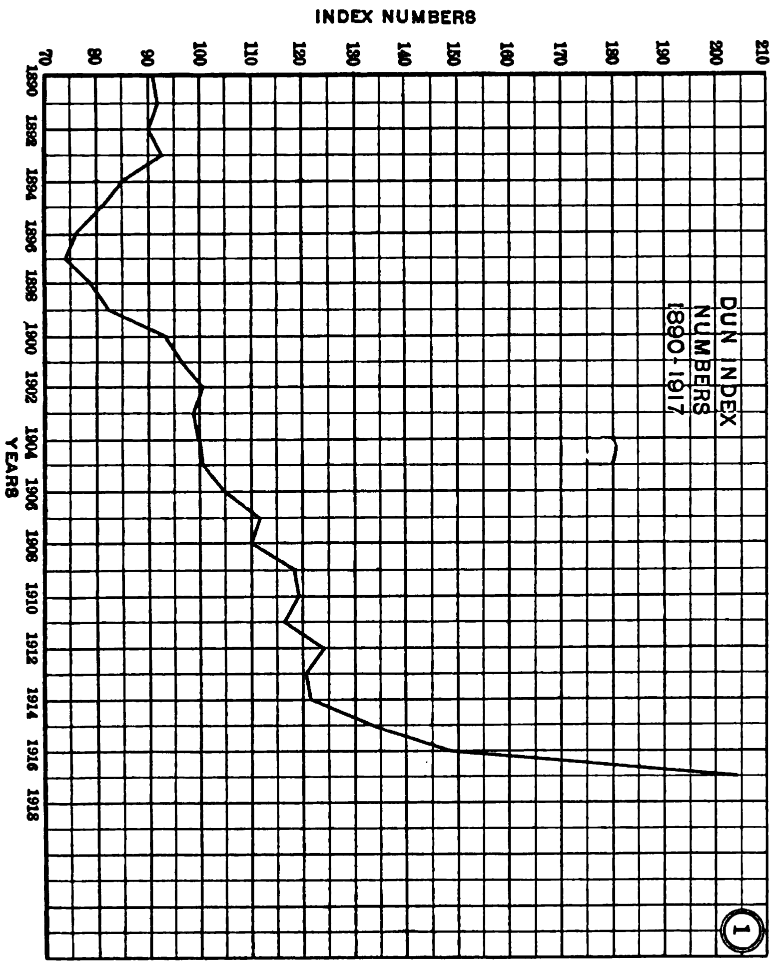
For a great many years the Dun index numbers had the approval of the business world. These numbers were based on an approximately scientific conception of the important factors of the cost of living, because a constant weighting of the commodity groups was maintained, irrespective of the number of commodities in the group. The Gibson index is designed to continue the Dun series, which ceased with the number for May, 1907. The Gibson numbers claim to be a satisfactory measure of the rise and fall of commodity prices.

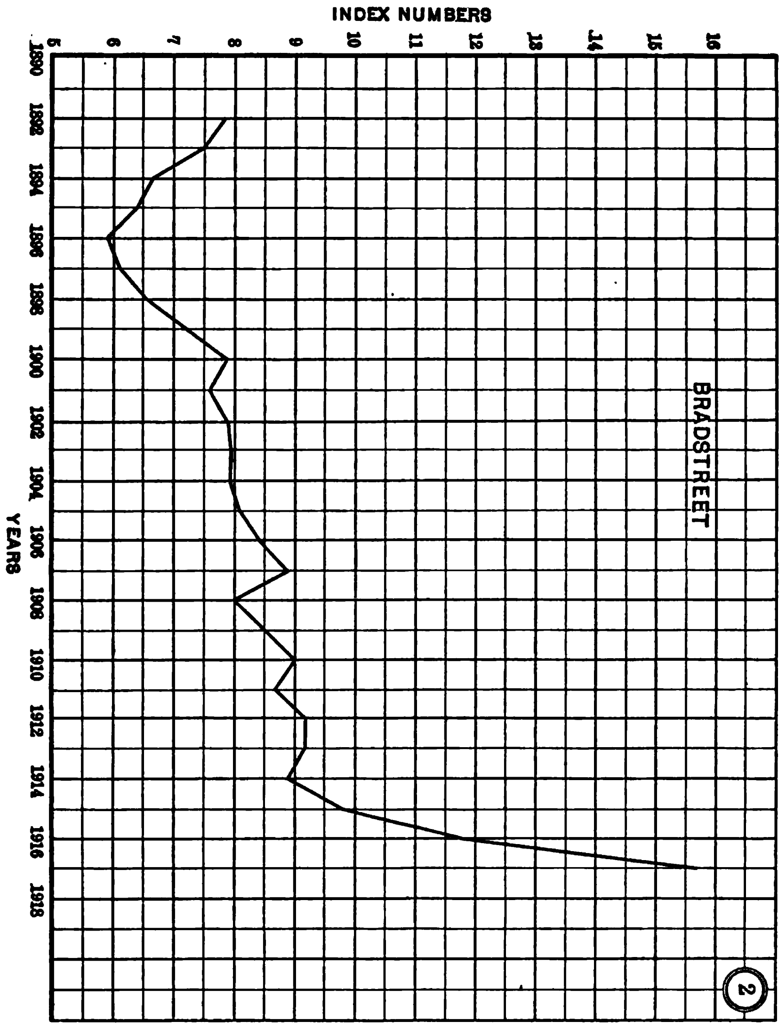
Carroll D. Wright, the first statistician of the bureau of labor, devised the plan of recording the actual and relative prices of a long list of commodities from which investigators may make such selections and combinations as their purposes require. The development of an index number must be made with due regard for the purpose for which it is to be used.

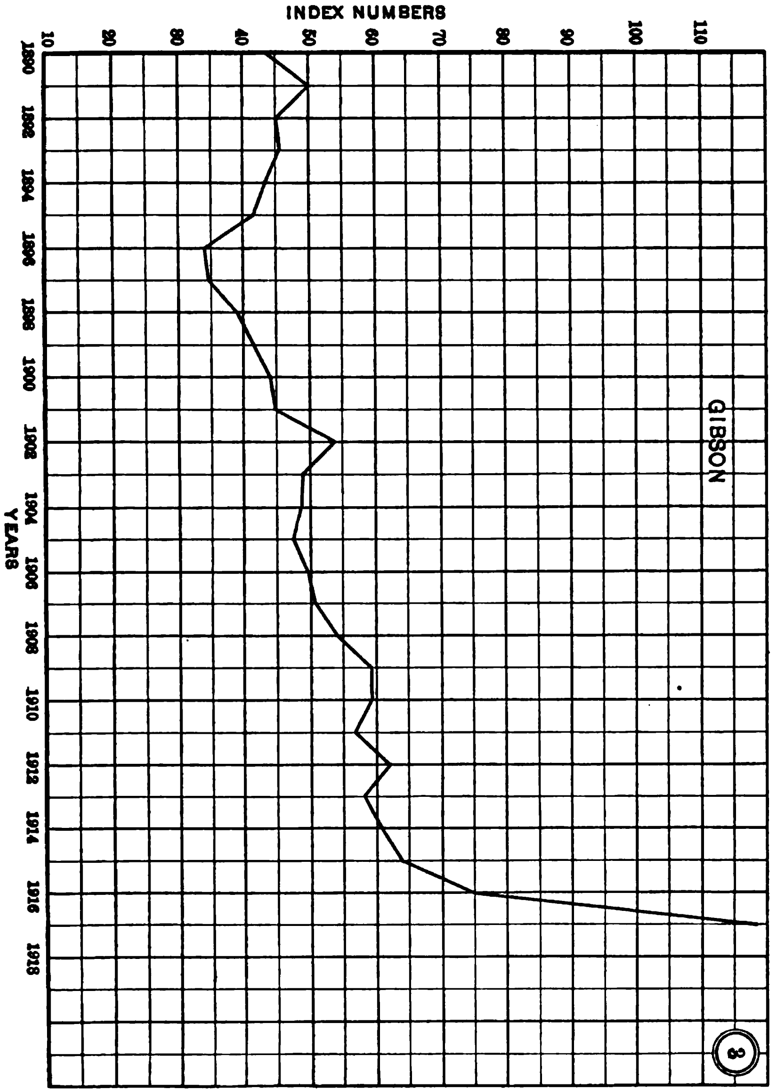
Seven index numbers are available for the study of price movements. The first step toward comparing different systems of index numbers is to throw them into similar form and establish them upon a common base. A cursory examination shows that these seven series, made by five independent organizations, have a marked family resemblance. The testimony concerning the major facts of price fluctuations from these seven different sources is so unanimous that one can scarcely doubt its validity.

In thinking of index numbers it should be remembered that during the last nineteen years throughout the gold-standard world, the general level of prices has been rising, or, in other words, the

purchasing power of gold has been falling; that all indications point to the continuation of this tendency for many years to come, and that this progressive shrinkage in the purchasing power of gold is a serious menace to the stability of business, disturbing the normal relations between those forms of income or prices which are relatively fixed, such as interest, rent, salaries and wages, and those which are more promptly adjusted, such as the prices of most stable commodities.




INDEX NUMBERS
5
6
7
8
9
10
11
12
13
14
15
16
YEARS
1890
1892
1894
1896
1898
1900
1902
1904
1906
1908
1910
1912
1914
1916
1918
BRADSTREET
2


INDEX NUMBERS
10
20
30
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100
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YEARS
1890
1892
1894
1896
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1900
1902
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1906
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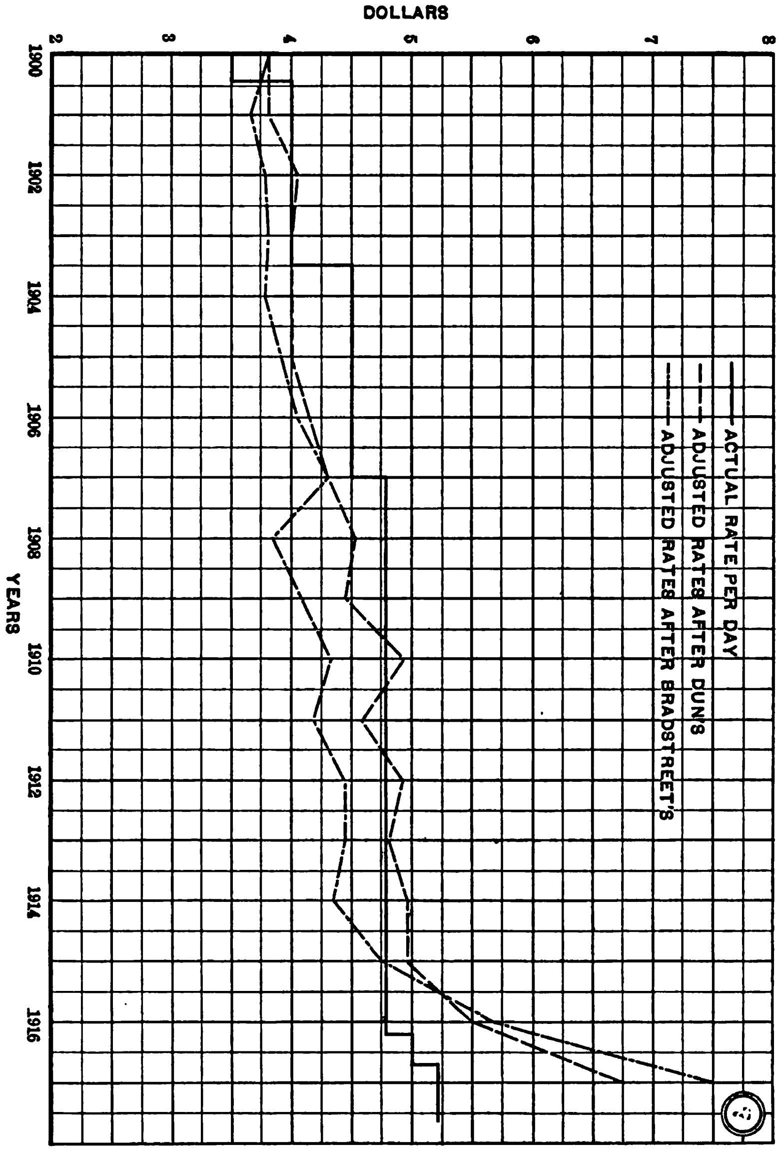
1910
1912
1914
1916
1918
GIBSON
3


DOLLARS
2
3
4
5
6
7
8
YEARS
1900
1902
1904
1906
1908
1910
1912
1914
1916
ACTUAL RATE PER DAY
ADJUSTED RATES AFTER DUN'S
ADJUSTED RATES AFTER BRADSTREET'S

		Dun		Gibson		Bradstreet		Dept. Labor	
	Year	Index No.	Adjusted	Index No.	Adjusted	Index No.	Adjusted	Index No.	Adjusted
1	1890	90.9	61.08	43.4	57.83	*	....	66	66
2	1891	92.2	61.95	50.9	67.69	*	....	66	66
3	1892	90.0	60.48	45.3	60.25	7.78	65.81	61	61
4	1893	92.4	62.09	46.0	61.18	7.53	63.70	63	63
5	1894	84.7	56.91	43.4	57.83	6.68	56.51	56	56
6	1895	81.3	54.63	42.0	55.86	6.43	54.39	57	57
7	1896	76.0	51.07	34.0	45.22	5.91	50.00	54	54
8	1897	74.0	49.72	37.7	50.14	6.12	51.77	54	54
9	1898	78.9	53.02	38.7	51.47	6.57	55.58	56	56
10	1899	82.8	55.64	41.6	55.32	7.21	60.99	60	60
11	1900	93.4	62.76	44.2	58.78	7.88	66.66	65	65
12	1901	95.9	64.44	44.5	59.18	7.57	64.04	64	64
13	1902	100.4	67.46	53.5	71.15	7.88	66.66	69	69
14	1903	99.0	66.52	49.0	65.17	7.94	67.17	69	69
15	1904	100.2	67.33	48.3	64.24	7.92	67.00	70	70
16	1905	100.6	67.60	47.2	62.77	8.10	68.52	69	69
17	1906	105.3	70.76	49.8	66.23	8.42	71.23	72	72
18	1907	111.8	75.13	50.9	67.69	8.90	75.29	76	76
19	1908	109.9	73.85	54.2	72.08	8.01	67.76	74	74
20	1909	117.8	79.16	59.2	78.73	8.52	73.08	79	79
21	1910	119.2	80.10	59.3	78.87	8.99	76.05	81	81
22	1911	116.8	78.49	56.9	75.67	8.71	73.68	77	77
23	1912	124.4	83.59	62.6	83.25	9.19	77.74	82	82
24	1913	120.9	81.24	58.1	77.27	9.21	77.91	81	81
25	1914	122.2	83.11	60.8	80.86	9.72	82.23	80	80
26	1915	126.4	84.94	64.0	85.12	9.85	83.33	81	81
27	1916	148.8	100.00	74.9	100.00	11.82	100.00	100	100
28	1917	204.1	137.15	110.8	147.36	15.64	132.31	†	..
29	Sum	2960.3	1990.22	1471.2	1957.21	218.50	1849.41	1882	1882
30	Average	105.7	71.08	52.5	69.9	8.40	71.13	69.7	69.7
31	Base, 1916	148.8	....	74.9	....	11.82	....	100	..
32	Multiplier	.672	1.	1.33	....	8.46	....	1.00	..

* No numbers recorded. † Not yet published.

This table gives the average yearly index numbers according to Dun, Gibson, Bradstreet and the department of labor from 1890 to 1917.

Line 29 gives the sums of each of the columns. Line 30 shows the average. Line 31 gives the base figure selected, that is, the year 1916 for each index number. This index number for 1916 is then called 100. The actual index number for 1916 divided into 100 yields as a quotient a number which, used as a multiple, will reduce all of the index numbers in that column to a common base, for comparison.

It is entirely within the possibilities that prices may rise more and more until many years hence we shall see the culmination of this rising price epoch, unless in the meantime wonderful new gold fields are discovered. The synthetic chemist and the electrical engineer may of course check this rising tide of prices in spite of any failure to discover new gold deposits sufficiently large to be effective. The generation which succeeds in producing flour and meal and sugar cheaply, by a synthetic process, will have made vastly more progress in world production than the nineteenth century made when it added the Mississippi Valley and Canadian and South American plains to the world's producing areas.

Rising prices are by no means an unmixed evil. A long period of prolonged rising commodity prices energizes the business world generally, operates to the advantage of debtors and of owners of production processes and to the disadvantage of creditors generally, of wage earners, of salaried persons, and of receivers of fixed incomes. It causes interest rates to rise, lessens the severity of crises and the duration of depressions and stimulates social reconstruction, both in fact and in philosophy.

I desire at this point to indicate how small is the general perception of the change of the value of the dollar by quoting the words of the venerable but peppery president of the American Federation of Labor at a public hearing, April 6, 1916, before the committee on labor of the house of representatives on a joint resolution to appoint a commission to study social insurance. He said:

> The statement to which I took exception and which I now emphasize was a subtle blow at the life and vitals of the trade union movement and trade union activity. If, as Dr. Rubinow's charge implies, trade union work has brought about this one condition, that wages have not kept pace with the cost of living, if despite trade union activity in the past twelve years there is fifteen per cent. less of purchasing power of the necessities of life, then the whole work of the trade union movement is wrong and must of necessity be a failure. So far as I am concerned, I will say this, that if I believed that to be a fact, I would not give my time and my life to trade union work, and I would not advise any man or woman to join a trade union. If the conditions of the workers are worse than they were twelve years ago, as I say, our cause has been a failure.

During the decade 1899 to 1909, the general price index rose from 99.5 to 130.0, an increase of over 30 per cent. In other

words, the commodity price level went up faster than the money earnings of labor, according to the figures prepared by the bureau of labor statistics; hence the real annual returns for labor showed a decline, slight in some trades, but large in others. The evidence, then, indicates that all the intrenchments of organized labor, all the legislation in favor of the laboring classes, have failed to prevent the downward trend of commodity wages.

Irving Fisher, professor of political economy at Yale, proposed a plan in 1912 for stabilizing prices by stabilizing the gold dollar, by means of index numbers of prices, such as those of Sauerback, the *Economist,* the British board of trade, the United States bureau of labor, Bradstreet or Gibson. He called this a compensated dollar.

The bulletin of the bureau of labor statistics, number 173, says:

> The first step framing a clear idea of the ultimate use of the results (that is, index numbers) is most important, since it affords the clue to guide the compiler through the labyrinth of subsequent choices. It is, however, the most frequently omitted. When the end in view is specific and capable of precise statement, the problem of choosing methods is comparatively simple. Straightforward logic then determines what commodities should be included, what sources of quotations should be drawn upon, and how the original data should be worked up to give the most significant results.

To consider specifically the application of such an index number to the wage scale of a New York union of skilled mechanics, let us assume a base or par rate of wages, arrived at by mutual agreement—say, for instance, $5.20, which is a rate that went into effect April 1, 1917. Dun's index number on that date was 190.012. Let us assume that wages shall be readjusted once in six months. Dun's index number for October 1, 1917, six months later, was 219.679, or an increase in general commodity prices of 29.667, or 15.6 per cent.

On authority of the bureau of labor statistics, the wage earner spends three-quarters of his wages for food, clothing and rent, and other things responding to these general price fluctuations. He would then set aside $3.90 out of the $5.20 for subsistence. The index number for the end of the six months period indicates that subsistence costs 15.6 per cent. more; therefore increase $3.90 by 15.6 per cent., making it $4.50, to which should be added

the quarter of the base rate not affected by the commodity market, $1.30, thus making the readjusted rate $5.80, or a net advance over the base rate of 60 cents a day.

The corresponding Bradstreet numbers are 14.5769 and 16.9117; the difference, 2.3348, shows an increase in the index of almost exactly 16 per cent. Applying this number as before, the adjusted wage is $5.824, or an advance of sixty-two and four-tenths cents for the six months' period ending October 1, 1917.

Let us examine the rate of wages of the same union from the index number point of view over a longer period of time, beginning with the year 1900. The rate in 1900 was $3.50 a day. The Bradstreet index for that year was 7.88. The average monthly index for eleven months of 1917 was 15.4595. The difference between the two indexes, 7.5795, shows an increase in 1917 of 96 per cent. Increasing three-quarters of the 1900 rate by 96 per cent. ($2.52), the corrected rate for 1917 would be $6.015, or in other words, the purchasing power of the $3.50 wage in 1900 is just equal to the purchasing power of a $6.00 wage in 1917.

It may be argued that a periodic adjustment every six months would interfere with contracts in course of execution. Let us admit this objection and at the same time analyze it. If no allowance were made in estimating future work for the contingency of an unknown advance in the rate of wages, due to the change in the index number, then under the conditions specified above, the advance of 60 cents would cost the contractor 3.9 per cent., assuming the labor to be 35 per cent. of any given contract: or 2.78 per cent., assuming the labor to be 25 per cent. of any given contract.

An advance in the rate of wages, which apparently increases the cost to the employer 3.9 per cent., in my judgment, would be more than offset by an increased labor efficiency; because the employee would be appreciative of the spirit of coöperation reflected by the adoption and practice of a plan of wage adjustment calculated to protect him against advances in the cost of living; and he would consciously or unconsciously respond to such an effort at practical coöperation on the part of his employer.

It should be stated, however, that in the example cited above the index number used might not be quite accurate in this par-

ticular application, because it is composed to some extent of factors which perhaps affect the cost of living only vaguely and indirectly. This number, for instance, gives the aggregate prices per pound of 96 different articles, including not only all kinds of food products, but also 13 metals, 11 chemicals and drugs, 7 building materials and also raw and manufactured textiles, coal and coke, mineral and vegetable oils, naval stores, and 7 miscellaneous articles; but nevertheless it gives a broad general indication of the changes in general price levels, and so perhaps would be as applicable as an index number derived from the price movements of only foods, clothing, rent and fuels.

It may also be argued that this plan of wage readjustment would tend continually to raise wages even beyond the critical point at which the tendency would begin to slow down the industry. This objection leads to a consideration of the most fundamental theory of wages.

Labor has a value because its services or products have a value. If the labor is misspent, the product is valueless, and in the long run the labor will be equally so. Labor secures a remuneration because it produces something for which people are willing to pay. In other words, wages depend on productivity. The wages of the laborer depend upon the value of his labor and not upon his wants. But wages vary with the standard of life, and anything which lifts the standard will raise the rate of wages. The highest standard, though, will not prevent wages from falling in the face of a decrease in the demand for the product and a decline in industrial prosperity. However, anything which tends to increase the productivity of labor will raise the rate of wages. Raising the rate of wages in the long run will raise the standard of living and in general a higher standard of living reflexively raises the productivity.

This being so, we can safely leave this objection as being one which might as well apply to the present method or any other method of readjusting wages.

Now this application of an index number for wage readjustment is in reality a device for stabilizing wages. The prices of commodities are quoted in terms of money, but, what is less often realized, the price of money is quoted in terms of commodities. If a journeyman two years ago when wheat was quoted at $1.20

had been paid four bushels of wheat for a day's labor, he would have received the economic equivalent of $4.80 in money, the rate then prevailing in New York. If, however, he were paid four bushels of wheat to-day for a day's labor, he would get the economic equivalent of $8.80. The price of commodities has risen, the price of money has fallen.

It will be argued that union men will not be content with a relatively constant wage-position in the economic world—that they will demand also an absolute advance, an advance beyond the point indicated by an index number. As long as the national wealth tends to increase faster than the population, this demand on the part of union labor will be justified and will be justified in some more or less definite ratio to the increase of national wealth. This is the laboring man's only way of participating in an increased national wealth, national surplus, in the creation of which he has had so large a share. The demand for an absolute increase on the part of any particular trade, however, will be restrained by force of public opinion and by economic forces, if such a demand is out of step with the demands of other trades requiring equal or similar skill.

Some may say that the advance in wages in the various trades has been absolute instead of relative, and they may point to the wages of the Chicago Electrical Union as an example.

Let us analyze the case from the index number point of view. In 1907 the wages in Chicago in the electrical trade stood at $4.00 a day. The Bradstreet index number for 1907 averaged 8.90. On September 1, 1917, the index was 16.6441, and the average index number for twelve months of 1917 was 15.655.

Applying as before the average index number for 1917 to this case, we find that a $4.00 wage in 1907 would be equivalent to $6.28 in 1917. If, however, we compare the average index number for 1907 with the index number for September 1, 1917, when the $6.25 wage took effect in Chicago, we get a wage of $6.61, which shows how conclusively the $6.25 wage is justified, and also that there has been no absolute advance whatever.

By the intelligent application of some such plan as the one outlined, there will result as a matter of fact an absolute advance in wages to the union man, due to the fact that he will work more

days in the year when and because wage disputes are eliminated. This absolute advance is not one in the economic sense, but purely in the personal sense.

After all, any discussion of the wage question, if confined to the rate of wages per diem, is inadequate and superficial. The yearly income is the only important desideratum for a wage earner, and it is also for any person whose income takes any other form.

There remains the more difficult problem of scientifically fixing the base rate for wages. This is a much more complex problem than applying an index number to raise or lower the base. The *Times Annalist* has produced an index number based on the wholesale price of food "selected and arranged to represent a typical family's food budget," an item which is 40 per cent. of the workingman's whole cost of living. His rent may be placed at 20 per cent. and his clothing (including, of course, his family's) at 15 per cent. If we were fixing a base rate, say, for the present month, it would probably be fair to calculate it on the basis of 45 per cent. for food, 15 per cent. for rent, 15 per cent. for clothing and 25 per cent. for surplus, from which he must take the money he spends on contingencies, non-essentials and pleasure. It would probably be sufficiently correct to assume any present wage as a base rate—it would certainly avoid endless discussions and fruitless speculations on the cost of keeping an average family.

Probably all parties concerned would rather avoid the question by arbitrarily accepting the existing rate than to create a new rate, however scientifically devised.

The bureau of labor statistics gives us an idea of the distribution of expenditures for families typical of the mass of skilled workmen. Based on 2,561 families located in various cities in the country, the bureau has derived the following results:

GROUP	Per cent. expenditures for each purpose	Proportions of 10,000
Rent	15.06	1506
Food	41.03	4103
Fuel	5.00	500

GROUP	Per cent. expenditures for each purpose	Proportions of 10,000
Clothing	15.31	1531
Lighting	.90	90
All other purposes	22.70	2270
	100.00	10000

It would probably suit all practical requirements to regard the wages now prevailing in different localities as the base rate. At least this plan would be workable until a better had been devised.

The United States bureau of labor statistics has selected the years 1900-1909 for striking an average to serve as a base, or par, for developing its index number. Commodity prices for this period are averaged for the ten years and the result is called 100. If the weighted average of basic commodity prices is 3 per cent. higher for 1913, the index number for 1913 is + 3 or 103. A base or par rate of wages could similarly be established from the prevailing wages during the same ten years' period and in as many localities as might be found desirable.

Wages could then be adjusted from this par periodically by comparing the index number corresponding to par with the index of the period next preceding the time selected for adjustment.

This plan has the merit of immediate practicability. The means are at hand, and the machinery already in motion for giving it a trial; whereas the alternatives which have at various times been suggested for regulation of prices by government, for preventing commodity price increases by the "compensated dollar" having a multiple standard of value, etc., are not easy to try because they require legislative action following a vast amount of national education. Government regulation of prices is fundamentally wrong and therefore impractical except in occasional emergencies. The "compensated dollar" plan practically proposes that the United States and probably other gold standard countries should cease to have a primary money whose bullion value is its monetary value, although the scheme is very ingenious and persuasive.

Considering what a vital function an index number may be made to perform for fixing wages equitably, the number should be developed and promulgated by the United States government, as, for instance, are the crop reports by the department of agriculture and the currency circulation reports by the comptroller of the currency. The department of labor has for some years developed and published an index number which might serve every purpose required by the plan here outlined.

While I believe this application of an index number to wages is a novel idea, yet something akin to it was described by Sir Stephenson Kent, head of the special mission of the British munitions ministry, at a recent dinner in New York where he was a principal speaker. He said that a government committee on production was set up, whose function it was to ascertain what, if any, the increased cost of living amounted to and to issue a national award in regard to that labor whose wage had been fixed, so as to meet the increase in the necessities of life that that labor might find. That committee meets three times in a year and has the necessary statistics laid before it, receives representations from trade unions and from any one else who has a voice or should have a voice in the matter, investigates the case very carefully, and then gives instructions that this labor should receive so much extra per week to meet that increased cost. That is paid by the employer and is recoverable by the employer from the state. It is the state's charge.

This is admittedly a war measure, inexact, dependent on a board's arbitrary administration, and, as Sir Stephenson said, the bonus was determined by the advancing cost of provisions alone, no account being taken of the many other commodities entering into the cost of living, or the general depreciation of the pound sterling. This plan, of course, would not work on a declining market or with the pound increasing in purchasing power.

In closing I beg leave to quote the words of Seligman as follows:

> Economic, political and ethical forces are conspiring to bring about progress by raising the social level. In ordinary business life this means the gradual but clearly discernible elevation of the standard of commercial morality. So far as poverty is concerned, it means the lifting of the standard of life of the laborer and the setting of an irreducible minimum, below which national production is not worth having. Practically this

process assumes the various forms of trade union activity, of education of the unskilled, of factory legislation, of social insurance, of workmen's compensation, of improved housing, of trade agreements, of control of monopoly, and above all, of the curtailment of special privileges. The process is a slow one, because it is an arduous task to make the successful and self-satisfied business man realize that the true ultimate interests of his class are associated with the increased consumption that can come only from the higher standard of life of the mass of producers. It is in the last instance public opinion alone which in a democracy can protect the well-intentioned and long-sighted employer from the unfair competition of his unscrupulous and selfish rivals.

Deductibility of Interest Charges Under Federal Tax Laws

By Frederick Thulin, C.P.A.

Levy Mayer, of the Chicago bar, in his recent address *Follies of 1917*, delivered before the Illinois state council of defense, made caustic reference to the federal taxing legislation enacted by congress in October, 1917.

While some of his remarks are now no longer true, one situation[1] under the law to which he took vigorous exception is still present. The statutory rule[2] itself is in a healthy condition with no indications in sight of an early demise. As Mr. Mayer's remarks have attracted much attention, the writer feels that a further discussion of the latter question is not inappropriate.

The section of the federal income tax law to which Mr.

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1 "If a corporation has a capital stock of $100,000 and during 1917 borrowed for its business purposes sums aggregating $500,000 and paid thereon $25,000, but paid off all such indebtedness so that on December 31, 1917, there was none outstanding, the corporation would be allowed to deduct from its gross income only $5,000 for interest paid, or 5 per cent. interest on $100,000. The corporation's net income for income tax purposes, therefore, and upon which it would report and pay excess profits taxes and income taxes would be $20,000 more than its actual net income."

The ruling which allows the inclusion in "invested capital" under the excess profits tax act of the sum on which the interest paid cannot be deducted alleviates somewhat the illogic of the rule.

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2 In section 2, subsection G, act of 1913, the restriction made its first appearance. The second appearance of the restriction was in part II, section 12, paragraph 3, act of Sept. 8, 1916. The section in its final form appears in title XII, section 1207, paragraph 3, act of Oct. 3, 1917.

"The amount of interest paid within the year on its indebtedness (except in indebtedness incurred for the purchase of obligations or securities the interest upon which is exempt from taxation as income under this title) to an amount of such indebtedness not in excess of the sum of (a) the entire amount of the paid-up capital stock outstanding at the close of the year, or, if no capital stock, the entire amount of capital employed in the business at the close of the year, and (b) one-half of its interest-bearing indebtedness then outstanding: provided, that for the purpose of this title preferred capital stock shall not be considered interest-bearing indebtedness, and interest or dividends paid upon this stock shall not be deductible from gross income: provided further, that in cases wherein shares of capital stock are issued without par or nominal value the amount of paid-up capital stock, within the meaning of this section, as represented by such shares, will be the amount of cash, or its equivalent, paid or transferred to the corporation as a consideration for such shares: provided further, that in the case of indebtedness wholly secured by property collateral, tangible or intangible, the subject of sale or hypothecation in the ordinary business of such corporation, joint-stock company or association as a dealer only in the property constituting such collateral, or in loaning the funds thereby procured the total interest paid by such corporation, company, or association within the year on any such indebtedness may be deducted as a part of its expenses of doing business, but interest on such indebtedness shall only be deductible on an amount of such indebtedness not in excess of the actual value of such property collateral: provided further, that in the case of bonds or other indebtedness, which have been issued with a guaranty that the interest payable thereon shall be free from taxation, no deduction for the payment of the tax herein imposed, or any other tax paid pursuant to such guaranty, shall be allowed; and in the case of a bank, banking association, loan or trust company, interest paid within the year on deposits or on moneys received for investment and secured by interest-bearing certificates of indebtedness issued by such bank, banking association, loan or trust company, shall be deducted."

Mayer took particular exception, the writer believes, is deserving of criticism. The provision is so diametrically opposed to the accepted accounting principles and business practice on the point that the writer feels an early repeal or modification of the section is desirable.

As an axiom one might state that the non-recognition of fundamental distinctions in any legislation brings its own crop of trouble and fault-finding. This statement is particularly true if the statute concerns a taxing programme.

The failure of congress to recognize a certain classification of liabilities that pertain to business operations is responsible for the illogical legal rule on the subject. Congress, furthermore, has not as yet evinced a disposition to correct its first erroneous step.

In an analysis of corporate liability, one finds it is of two kinds:

1. Proprietorship liability, i. e., the liability to its stockholders.

   The proprietorship liability is divided into two further subclassifications:

   a. The proprietorship liability represented by the capital stock;

   b. The proprietorship liability represented by the surplus account or some subdivision of the surplus account.

2. Creditor liability, i. e., the liability to its outside creditors.

   The creditor liability is divided into two further classifications:

   a. The fixed liability—usually represented by a bond issue, but not necessarily so;

   b. The current liability—usually represented by:

      (1) The promissory note with a short-time maturity.

      (2) The commercial acceptance.

      (3) The open book account.

While the underlying reason for the section is clear enough and somewhat justifiable, viz., the recognition that the real capital contribution to a business in some instances may be in the form of a creditor liability and therefore should be appropriately classified as such in computing corporate income subject to taxation, the application of the logic has gone wofully astray.

The use of the capital stock paid in as a measurement of interest deductibility is only partly complete. If the capital liability of a corporation is to be used as a measurement, to be logical it must of necessity also include the surplus that has accumulated and is undistributed.

The excess profits tax act recognized the logic of this grouping in the computation of invested capital. Justice Holmes, in *Towne v. Eisner* (No. 563 October term 1917), gave recognition to the true accounting theory and the nature of capital liability in determining the taxability of the stock dividend. There seems, therefore, to be no good reason why undistributed surplus should not be given the same recognition in determining interest deductibility. Therefore, the first element of weakness of section 1207, paragraph 3, is the failure to recognize the surplus account or some division of the surplus account.

The portion of section 1207, paragraph 3, that deals with the other element of the measurement of interest deductibility is hardly less illogical in its application. The writer's quarrel is not with the arithmetic—one-half of the interest-bearing indebtedness. As a rough and ready rule of thumb which will not bear too rigid a scrutiny, one might state, with some degree of hesitancy, that the real capital employed in a business is its capital, having due regard for the definition of capital, plus a portion of a certain kind of indebtedness.

Congress failed, however, to perceive that the interest paid is income to the recipient and is in effect double taxation—not allowing the corporation to take a full deduction and taxing the recipient of the interest. The failure of the treasury department to recognize this principle in the case of alimony led to the supreme court's overruling the treasury decision in *Gould v. Gould* (38 Sup. Ct. 53). Where congress, however, has legislated on the point, the federal court is, of course, without power to interfere. Under section 206 of the excess profits tax act, the

partnership is in a superior position to the corporation in regard to interest deductibility. The partnership is not limited in the same manner as the corporation, but can deduct in full the interest paid or accrued, irrespective of the amount of such indebtedness, or the fixed or current character of such indebtedness.

When a certain portion of creditor indebtedness is deemed by legislative decree to be classified as capital indebtedness, it obviously follows that nothing but the most accurate appreciation of the various elements involved will produce equitable results.

The writer believes that congress did not use the nice sense of discrimination that the situation required. The legislative classification into interest-bearing and non-interest-bearing creditor indebtedness is not a true one. Having regard for the reason for the limitation of interest deductibility, the logical division is into fixed and current creditor liability,

The fixed liability—usually a bond issue—from its very nature is a liability that more or less partakes of the nature of a capital liability, although in form a creditor liability. The proceeds from a fixed indebtedness ordinarily are reflected in the fixed assets of a corporation. When the fixed liability is liquidated, usually it is done from a certain portion of the profits which have been appropriated for that purpose. Therefore, if the fixed liability were transformed into capital liability, it would be serving the same office to the corporate business.

Current liabilities, however, are of a somewhat different nature, although of the same legal effect. That one class of current liabilities bears interest does not militate against the soundness of the foregoing conclusion. The current liability ordinarily is not reflected on the debit side of a statement by a fixed asset, but by a current asset. Therefore, the current liability is liquidated by the sale or conversion of current assets and not by appropriated profits.

The final conclusive fact that negatives the soundness of the inclusion of current liabilities, in any classification of creditor liability that savors of a performing of a capital liability function, is this: the substitution of capital liability for current creditor liability will leave the average business somewhat over-capitalized, except during the seasonal activity of the particular corporate enterprise—a violation of sound business principles, medieval or

modern. It is difficult to see the underlying reason for the discrimination between interest-bearing and non-interest-bearing indebtedness. The discrimination, to say the least, is artificial. The accounts payable, i. e., the book accounts, represent a liability for goods purchased. The acceptance is a liability of the same character and is rapidly supplanting the open book account and reflects more clearly the seasonal, i. e., temporary character of the liability. While the notes payable usually bear interest, that fact is not material. The liability incurred is ordinarily for the same purpose as the liability incurred on the open book account and on the commercial acceptance. Therefore, in considering current liabilities, notes payable are used as a basis of measurement, but logically accounts payable and bills payable also should be included.

An equitable rule on the subject of corporate interest deductibility should, therefore, be based on capital liability—capital stock and surplus—and should only concern itself, if at all, with the deductibility of interest on the fixed creditor liability. The interest on current liabilities should be deductible in full.

While there cannot be much doubt that the original halting intention of congress was to limit deductibility of interest to interest paid on the fixed liability of a corporation, the language used in the act does not admit of this construction by the treasury department or by a court. Such errors of legislative language are, however, more frequent than is creditable to legislators.

Application of the Statutory Rule

The foregoing discussion is a criticism of the law. In the application of the present legal rule, there are situations that may give rise to difficulties in arithmetic. In any event the criticism of the rule is more understandable if the practice is understood. The simple phase in the application of the rule arises where the capital stock paid in is equal to or exceeds the total interest-bearing (fixed or current), indebtedness, outstanding from time to time. In such a case the interest paid is deductible in full. If the capital stock paid in does not exceed the interest-bearing indebtedness, the measure of deductibility is that noted by the statute.

To illustrate: if a company had a capital of $20,000 and a 6 per cent. bond issue of $50,000, the limit of deductibility would be 6 per cent. of $45,000.

The question is somewhat more complex where the element of interest-bearing indebtedness is of a current nature and fluctuates during the year, both as to interest rate and as to amount—and furthermore, where there may also be present a fixed interest-bearing indebtedness.

The situations involving the fluctuations of amount, interest rate and nature of corporate indebtedness are divisible into four classifications.

1. The indebtedness is liquidated during the taxable year.

To illustrate: on July 1, 1917, the Jones company borrowed $75,000 at 6 per cent. interest for a period of four months. The note and the interest thereon, $1,500, were paid at maturity, November 1.

The balance-sheet of the company on December 31, 1917, showed on the credit side:

Capital stock	$50,000
Surplus	50,000
Accounts payable	10,000

The treasury department, in applying the law to the foregoing situation, has held that the measurement of deductibility is based on the capital stock and therefore the amount of interest deductible is 6 per cent. of $50,000 for the period of four months, or $1,000.

2. The indebtedness is liquidated during the taxable year and other indebtedness is incurred and outstanding at the close of the year.

To illustrate: on January 1, 1917, the Jones company borrowed $75,000 at 6 per cent. interest for a period of four months. The note and the interest thereon, $1,500, were paid at maturity. On October 1, 1917, the company borrowed $50,000 at 6 per cent.

interest for a period of four months. The accrued interest on December 31, 1917, was $750. The balance-sheet of the company on December 31, 1917, showed on the credit side:

Capital stock	$50,000
Surplus	50,000
Notes payable	50,000
Accounts payable	10,000

The limitation in the amount of deductibility is the amount of capital stock, $50,000, plus one-half of the amount of notes payable, $25,000, or a total of $75,000. The measure of deductibility at the end of the taxable year governs for the entire taxable year, although a portion of the interest paid is on indebtedness that was liquidated prior to the end of the year. The interest paid, $1,500, and the interest accrued, $750, are therefore deductible in full.

3. The indebtedness liquidated during the year was coexistent with a debt that is outstanding at the end of the year.

To illustrate: on January 1, 1917, the Jones company borrowed $60,000 at 6 per cent. interest for a period of four months. The note and the interest thereon, $1,200, were paid at maturity.

On January 1, 1910, the Jones company had issued bonds for $50,000, maturing in ten years, bearing interest at the rate of 3 per cent. The interest paid in 1917 amounted to $1,500.

The balance-sheet of the Jones company on December 31, 1917, showed on the credit side:

Capital stock	$50,000
Surplus	50,000
Bond issue	50,000
Accounts payable	10,000

The maximum amount of principal on which interest can be computed and deducted under the law is $75,000. The treasury department, furthermore, has ruled that the indebtedness bearing the highest rate of interest can be considered first in arriving at the total allowable interest deduction.

In applying the foregoing rules, the monthly state of the corporate indebtedness is taken into consideration. During the first

four months of 1917 the outstanding interest-bearing indebtedness amounted to $110,000—$60,000 on a current liability and $50,000 on a fixed liability. Therefore:

Interest on $60,000 for four months at 6% is deductible	$1,200
Interest on 15,000 for four months at 3% is deductible	150
$75,000 limitation.	
During the succeeding 8 months the outstanding indebtedness was $50,000; therefore, interest on $50,000 for 8 months is deductible in full	1,000
Total allowable deduction for 1917 is	$2,350
Interest actually paid in 1917 is	$2,700

4. The indebtedness liquidated during the year was coexistent with a debt that has already been paid and with an indebtedness that is outstanding at the close of the year.

To illustrate: on January 1, 1917, the Jones company borrowed $60,000 at 6 per cent. for a period of four months. The note and the interest thereon, $1,200, were paid at maturity.

On March 1, 1917, the company borrowed $50,000 at 5 per cent. for a period of six months. The note and the interest thereon, $1,250, were paid at maturity.

On January 1, 1910, the company had issued bonds amounting to $50,000, maturing in ten years and bearing interest at the rate of 3 per cent. The interest paid in 1917 amounted to $1,500.

The balance-sheet of the Jones company on December 31, 1917, showed on the credit side:

Capital stock	$50,000
Surplus	50,000
Bond issue	50,000
Accounts payable	10,000

The maximum amount of principal on which interest can be deducted is $75,000.

In applying this rule and the rule enunciated by the treasury department, the same general principles obtained that are present in the preceding division.

During January and February of 1917 the outstanding interest-bearing indebtedness was:

Note (1)	$60,000
Bonds	50,000
	$110,000

Interest on first loan, $60,000, for 2 months at 6%	$600
Interest on second loan, 15,000, for 2 months at 5%	125

$75,000 limitation.

During May, June, July and August the outstanding interest-bearing indebtedness was:

Note (2)	$50,000
Bonds	50,000
	$100,000

Interest on second loan, $50,000, for 4 months at 5%	$833.34
Interest on bonds, 25,000, for 4 months at 3%	250.00

$75,000 limitation.

During September, October, November and December the outstanding interest-bearing indebtedness was:

Bonds	$50,000

As this amount comes within the legal limitation, the interest is deductible in full.

Interest on bonds, $50,000, for 4 months at 3%	$500
Interest deductibility for 1917	$2,983.34
Interest actually paid in 1917	$3,950.00

The amortization of the premium or discount of a corporate bond issue presumably is taken into consideration in computing interest deductibility.

To illustrate: the X Co. issues $100,000 par value bonds in 1917 at 90, due in 10 years and bearing interest at the rate of 5 per cent. The yearly interest charge is $5,000 plus the yearly amount of amortized discount, or $6,000, interest rate approximately 6%. If the bond issue has been sold at 110, the yearly interest charge is $5,000 less $1,000, the yearly amount of amortization, or $4,000. The interest rate in this case is also deemed to be approximately 4 per cent. and not 5 per cent. If, however, discount or premium on a bond issue has been written off prior to 1909, it cannot be considered in subsequent years (T. D. 2161).

The treasury department, as yet, has not formally passed on the question whether or not the indebtedness secured by collateral of the appropriate kind shall be considered as interest-bearing indebtedness in computing the interest deductibility on other indebtedness. Fairly construing title XII, section 1207, paragraph 3, act of October 3, 1917, the secured indebtedness should not be used as a measurement—the interest on the secured debt is deductible in full.

Capital	$15,000
Bonds (6%)	50,000
Secured debt	50,000

The interest on the bonded indebtedness is deductible to an amount not to exceed $40,000. The qualification in regard to "collateral secured indebtedness" is artificial and only confuses the question.

Interest paid by a member of the federal reserve system on its rediscounts with the federal reserve bank of its district is obviously not the interest payment contemplated by the section and is deductible in full. The rediscounting is a transfer of property to the federal reserve bank and the interest paid by the rediscounting bank is analogous to the giving of cash discount—disposing of a credit for a present value.

Financial Reports of Public Institutions*

BY LLOYD MOREY, C.P.A.

The preparation and distribution of financial reports form one of the most important duties as well as one of the most valuable opportunities connected with the work of the financial officers of both public institutions and private concerns. Financial reports are primarily informative in character and design, but they have the additional possibility of presenting a comprehensive and accurate return of the stewardship involved in the office and of constituting a permanent and accessible record of the transactions and affairs which are reported. In public institutions, particularly, they can be made of infinite service to all persons directly interested in the administration of the institution's affairs as well as to the public at large.

The qualities of a good financial report, whether public or private, consist particularly in clearness, brevity and completeness. Clearness has to do with arrangement of material, with statement of terms and with indexing. Brevity as well as completeness must be governed by the purposes of the particular report and the uses to which it is intended to be assigned.

It may seem trite to suggest that a good financial report must agree with the records, yet there are many reports in which the material is so rearranged and so differently stated that it is extremely difficult to trace the relation between them and the original records. Other reports include a considerable amount of data that cannot be discovered in the accounting records. In either case the method is, we believe, erroneous, and a properly designed report should be capable of complete reconciliation with the accounting records on which it is based. In addition it should reconcile fully with all previous reports of the same kind so that the entire set will constitute a complete and continuous collection of financial statistics.

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*An address delivered at the annual convention of the Association of Business Officers of State Universities, Bloomington, Indiana, 1918.

Reports rendered by financial officers of public institutions may be classified thus:

A. Reports to heads of departments;

B. Reports to executives, boards of control and state officers;

C. Reports to the public.

Each of these various classes of reports, being designed for a particular purpose, will require different arrangement and method of procedure, in spite of the fact that for the most part they all have to do with the same financial data.

Reports to heads of departments consist chiefly of statements of the condition of appropriations. Various methods for such statements are in common use, running from the one method of giving periodically a simple report that a certain amount of balance remains unexpended in a given appropriation to the opposite extreme of a complete detailed statement of every transaction having to do with the appropriation, with full explanation.

Banks and department stores have been responsible for the development of a type of report that meets the needs of this class of statements particularly. Their reports are now commonly maintained in the combination ledger-statement form, in which the statement to the customer, by means of a typing machine and of multiple form, is prepared during the course of the period, at the time when the entries are made in the accounts. This type of report is particularly adapted to the accounts with appropriations kept by public institutions and governmental departments. Numerous bookkeeping machines especially designed for use in such a plan are now obtainable, their practicability having already been established. A report of this kind combines the advantages of an exceptionally complete and serviceable ledger account making up the original record, with an unusually intelligible and valuable statement for the use of the department heads; and in addition, by means of its mechanical features, makes possible the keeping of the accounts with minimum bookkeeping difficulties and maximum clerical accuracy and efficiency.

It is almost needless to say in regard to reports concerning departmental appropriations that each such report should take into account not only vouchers paid out of the appropriation, but every

encumbrance or obligation against that appropriation, whether in the form of a voucher payable or an order or contract which will become a liability.

The second named group of reports, those to executive boards and state officers, prepared as a rule monthly or quarterly, should cover principally the following matters:

1. The condition of the various funds of the institution;
2. The extent to which the estimated income of the institution for the period involved has been realized;
3. The condition of appropriations and trust funds;
4. The general financial condition of the institution.

The first of these requirements will be answered by a cash statement. Such a statement should consist of a summary of the various funds, showing the receipts, disbursements and balances in each, also the amounts of warrants outstanding or other differences in the funds as between the books of the auditing officer and the custodian, so that two sets of accounts will be shown as reconciled.

The second item will be covered by an income account in which will be shown the realization on account of certain items of income as compared with the estimates made at the beginning of the period.

The third will be met by a summary of the material covered in the first group of statements described, those for heads of departments, and may well be arranged in the form of schedules classified by main divisions of the institutions so that copies of such schedules may be sent separately to the administrative officers of those divisions.

The last question will be answered by a current balance-sheet constituting a summary of all the accounts of the general ledger, which is an essential part of every well designed set of accounts, both public and private.

The reports to the public concerning public institutions or projects are among the most difficult of all reports to design. The public is not easy to reach and convince for any purpose, or with any project, and this is particularly true as to financial data. Reports of a financial officer are reports which will be used for a large variety of purposes, including reference by numerous persons intimate with the institution as well as by both interested,

disinterested and malinterested citizens. For certain of these purposes the report may be painfully brief, and yet for certain other purposes brevity will bring forth dissatisfaction. For still other of these purposes the most elaborate detail would not be over-sufficient. So it is important that a sane and comprehensive medium be found, whereby the main facts which it is desired to record are set out with particular clearness and in limited detail, in such a way as to anticipate as fully as possible the various demands made upon the publication.

Many public reports have been arranged so that a general balance-sheet is first stated. The accounting profession recognizes this to be the essential feature of commercial reports. It will, we believe, if properly designed, be of equal value in reports of public institutions. Such a balance-sheet should show clearly the various assets of the institutions properly divided as to their nature, that is,

A. Available for appropriation;
B. Held in trust;
C. Held as permanent endowment funds;
D. Invested in permanent plant and property.

The groups are best arranged in the above order, and each will be offset by the proper liability, reserve or surplus accounts.

Following the balance-sheet and properly linked to it should be schedules of income, expenditure and of property and investments, the various schedules being properly keyed together, and to the balance-sheet, and vice versa. The schedules of income should present an intelligible analysis in accordance with the nature of the institution. Income and receipts should be differentiated, if not identical, and it should be stated in what respect one does or does not include the other.

The schedules of expenditures should include only bona fide expenditures and should not include disbursements for supplies held in stock to be charged later to some appropriation and then become expenses or disbursements on account of trust funds. These must be separately and completely reported. It is important that expenditures be analyzed under a standard classification, uniform as to the departments of the institution itself, and, so far as possible, as to other similar institutions. The prime requisite of such an analysis is that it should be carried through on all

schedules so that it will reveal the distribution of expenses not only of individual departments but of the principal divisions of the institution and of the institution as a whole. It will be of largest service if the various items are reasonably general in character and easily defined instead of being carried out in fine detail. To be of the most value an analysis must be continuous for a succession of periods so that an accurate comparison may be established.

Statements of expenditures have very often consisted of lists of warrants or vouchers issued. Disbursements through warrants may or may not constitute expenditures, and as in the case of income and receipts any differentiation should be evident. An itemized list of vouchers drawn is in my opinion a thoroughly inadequate and impracticable report of expenditures. No satisfactory understanding of the operations of the institution can be obtained from such a statement. It is likely to provoke more useless criticism than good by making it possible to say that every feature of the finances has been published. On the whole I am inclined to believe that it would better be altogether omitted from all public reports. The best plan is to have the detailed transactions verified and certified by public accountants and then present to the public such a summary of transactions as will be both comprehensible and informative.

It would be folly to attempt to set up a scheme of reports which could be considered model to the extent that in all circumstances it would be found pre-eminently superior. The suggestions here made have to do with general features rather than with detail. I believe that they indicate the trend of modern financial reports and that they may be generally applied with abundant satisfaction and success.

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EDITORIAL

How Best to Serve

A great many accountants are asking the questions: "How am I to distinquish between my duty to the government and my duty to the public?" "Should I relinquish my practice and enter the government service or by remaining in practice and assisting the smooth conduct of business shall I be rendering an equal service to the nation?"

Naturally everyone who is imbued with even the faintest sense of loyalty or common decency wishes to do what he can to further the cause of liberty and civilization, and in any profession for which there is great demand by the government the difficulty of distinguishing between duty and inclination may be acute.

For example, we can imagine a partnership of accountants which for years has been acting as auditor for a group of industries. These industries have lately been taken over by the government or their entire output has been commandeered by the government. No one is so familiar with the history, development and condition of the industries as is our supposed firm of accountants. Would the partners of this firm be rendering a greater service to the country if they were to continue to give the benefit of their advice and assistance to the management of the industries than if they were to enter government employment in any of the many capacities which are open to them?

The scarcity of qualified accountants is becoming a most serious matter and the government is likely to go to even greater lengths than heretofore in order to obtain the necessary number and quality of men to supervise accounting work. The authorities

seem to be committed to the policy of payment upon a cost-plus-percentage basis, and, whether wisely or unwisely, it is apparent that there will be a continuance of this method of payment for goods acquired. Every cost-plus contract means the need for an accountant to determine the cost. Contracts multiply daily, consequently the need for accountants multiplies daily, but unfortunately there is not any substantial increase in the number of accountants.

There probably is not an accounting office of any importance in the country which is not overburdened with ordinary commercial and financial accounting work. In addition, the government through its various branches of activity is calling for assistance. The heads of great departments write or telegraph to the American Institute of Accountants and to prominent firms begging for men.

What is the duty of the accountant in these circumstances?

At first glance it might appear that the proper course for the profession to pursue would be to drop everything and hold itself in readiness for whatever demands the government might make; but it is doubtful if such a course of action would in the long run be the best.

We do not doubt that the great majority of practising public accountants would be willing to forego the profits of their practice for the duration of the war. The fact that so many prominent members of the profession are serving the government without compensation is clear evidence of the attitude of our representative men. The number of accountants who have entered the departments of war and the navy and have assumed commissions with a scale of pay far below their ordinary incomes is further proof of the willingness of the profession to do its share.

Frankly, it is impossible to express an opinion as to the proper course of action for the profession as a whole. Each practitioner must decide the question for himself, giving due weight to his circumstances, the nature of the work he is now doing and its relation to the work of the government, and also considering the value of the service which he might render were he wholly in the pay of the government.

We can readily imagine accountants whose present practice is so closely tied up with war industries that it would be unwise for them to think of making a change. We can as readily imagine

others whose practice could be interrupted without serious injury to the business of the war, and these men we believe should make the utmost sacrifice possible and serve the government in uniform or on its civilian payroll.

Among the people who ask questions as to their duty there seems to be a very general uncertainty as to the status after the war of men who have given up the public practice of accounting and devoted their energies to the work of the government. We believe that there is no doubt whatever as to the opportunities for such men when they return to public practice.

The work of the public accountant is not concerned merely with a period of transition in business development. It is as much a fixture in the business world as any other department of activity and there will always be increasing need for the public accountant. As everyone knows, the supply is far below the demand and additions to the force are few and at the present moment almost negligible. The work for the accountant will be greater after the war than it was before the war began, and there will be comparatively few more men to undertake it.

For the sake of illustration let us draw attention to the fact that none of the present generation will probably live long enough to see the day when there will be abolition of the various plans of taxation which have been and will be adopted during the war. There may be reductions in the rates of taxes, but all taxing measures which are productive of substantial revenues to the government must be continued until the nation shall have wiped out most of its bonded and other indebtedness which is fast accumulating while the war continues. If all else failed and business were at a standstill the federal revenue laws would provide an abundance of work for all the public accountants who are now available and for many times their number.

We do not believe that fears for the future need deter any accountant from entering his country's service. How best to serve he must decide for himself.

Padding the Cost

The recent discovery by agents of the department of justice that there has been a gang or perhaps gangs of persons operating in Washington as contract agents must have been somewhat of a

shock to everyone. It is almost incredible in these days that the operation of such a plan as seems to have been carried out in many instances should be possible.

It appears that the persons concerned have represented themselves to be in close touch with the government or some of its agents and therefore in a position to secure contracts for the supply of war materials for the government.

The guileless manufacturers seem to have been convinced of the ability of these agents to secure contracts, and in some cases the evidence indicates that the agents have been successful in obtaining the orders which the manufacturers desired. In other cases the agents have drawn commission ranging from 2% to 20% without any very clear proof that they had anything whatever to do with obtaining the contracts.

The remarkable feature of the whole case seems to us to be the ability of the contract agents to operate so long without detection. Compensation for practically every government contract has been fixed upon a cost-plus-percentage basis, and in the determination of costs certain set rules have been provided.

The contract commissions which have been paid must have been covered somewhere in the cost, and if there had been proper supervision there would have been instant discovery.

In passing it might be noted that there is an additional undesirable feature in the case in that if the commissions paid to agents were included in the cost the percentage of profit allowed by the government was correspondingly increased. In other words, while the manufacturer was able to pay a commission to his agent for obtaining the contract and to cover such commission in his cost he not only defrauded the government to the extent of the commission but also by the amount of percentage on such commission.

At the beginning of the war accountants recognized the possibility of injustice and interminable dispute as to the calculation of cost and the government was urged to exercise the utmost caution. The contracts which were prepared at the beginning were far from adequate, and we have a fear that there has been no great improvement in many of the contract forms.

But, however accurately the form of contract might provide for the determination of cost, the result desired would not be obtained unless there were proper supervision. That manufacturers

were able to cover up commissions ranging as high as 20% in their cost of production shows there could have been nothing approaching adequate supervision.

The government now seems to be awake and willing to make provision as far as possible for the prevention of such fraudulent practices as have been exposed. Let us hope that there will be at least a reasonably intelligent supervision of statements of cost presented to the government.

Income Tax Department

EDITED BY JOHN B. NIVEN, C.P.A.

We as a nation are learning what taxation can mean and can do. We are daily witnessing enlargements of the duties which conditions demand of our government, and we are steadily gaining experience in drawing, for the discharge of those duties, a share of the annual increment. Each succeeding law is more complete and far-reaching than the last, but we have much yet to learn. Our legislators are now engaged in gathering data, born of our experience, to serve as the foundation for a new revenue law, promised to remedy mistakes and inequities of the one now with us. Simultaneously continue to appear rulings clarifying the meaning of current laws and regulations and court decisions disposing of questions arising under still earlier laws, even to the parent of all our recent federal taxation, the corporation excise act of 1909.

The regulations classifying limited partnerships with corporations have had to be modified (by T. D. 2711). A distinction is now made between limited partnerships (existing under Pennsylvania laws and perhaps elsewhere) having actual or potential limited liability of general partners, transferability of shares and capacity to sue or hold real estate in the firm name and, on the other hand, those (existing in New York and most states) lacking these characteristics. The former only are to be treated as corporations, the latter as partnerships.

The term political subdivisions of a state, referring to public obligations the interest on which is exempt from taxation, is given a broad definition to include the many bodies of diverse designations fulfilling some one or other branch of recognized public work.

The next decision (T. D. 2716) is of interest to banks or like agencies for collecting "foreign items"—these being defined as dividends on the stock of foreign corporations or interest upon the obligations of a foreign country or non-resident foreign corporation, and forms being provided for the certificates of ownership for which the first agency in the line of collection is responsible.

Another decision (T. D. 2718) provides a table of accrued interest on certificates of indebtedness of May 15, 1918, acceptable in payment of income and excess profits taxes.

Then follows a series of seven rulings (T. D. 2721-2726) based on decisions of the federal courts. Of these, five (Nos. 2721-2725) relate to the old corporation excise act of 1909, the predecessor of the income tax laws; and the other two (T. D. 2720 and T. D. 2726) to the income tax act of 1913.

The first of them (T. D. 2720), although occasioned by a distinction in the treatment of dividends received by corporations and individuals such as does not now exist, is of interest because it classes as "associations," whose incomes are to be regarded as those of taxable entities like corporations, trusts so constituted as to control the time, manner and

amount of distribution of trust income among the beneficiaries, in the same way as a board of directors controls the distribution of corporate profits. Such income, says the court, is neither income of individuals nor of partners, because they cannot lay hands on it until appropriated by the trustees; neither is it income received by a fiduciary, who is bound only to report it as a matter of information, without being taxed on it. The decision, though somewhat lengthy, is printed in full.

Of the ensuing five decisions under the 1909 law, the first two (T. D. 2721-2722) disallow deductions from income made to cover cost of ore in the ground or other provision for depletion of minerals, but allow a proportionate deduction of royalties paid in advance on leased ore bodies. These cases have no bearing on conditions under present laws.

Three other decisions (T. D. 2723-2725) recognize the application to the earliest act of several phases of the accounting principles and departmental practices that are now well established in relation to current taxation; namely, that on the sale of assets the proceeds are neither wholly capital, and thus excluded, nor wholly income, and thus taxable on the gross amount; but that they are profits or losses, and thus far taxable or deductible from taxable income, to the extent that they exceed or fail to restore the capital they previously represented—that is, their value at the time the law went into force, or, if bought since, their cost. These principles are applied to cases of conversion of capital assets and the sale of corporate stock.

Another decision (T. D. 2726) is of permanent interest, settling, as it does once for all, the claim raised that a tax levied on income derived from export sales is a tax on exports in violation of the article (article 1, section 9, clause 5) in the United States constitution, prohibiting the laying of a tax or duty on "articles exported from any state." Says the court, it is not the articles exported that are taxed, but the income from them, at a point far removed from the exportation, and along with all other income, without discrimination as to kind. The judgment is conclusive in its assertions, and is printed in full.

Treasury Decisions

(T. D. 2711, May 9, 1918)

Income, excess-profits, and capital-stock taxes

Revision of article 62 of the income-tax regulations and article 2 of the excess-profits tax regulations regarding limited partnerships

Section 10 (a) of the income-tax act of September 8, 1916, as amended, provides for a tax upon the net income of "every corporation, joint-stock company or association, or insurance company organized in the United States, no matter how created or organized, but not including partnerships." Section 4 of the war income-tax act of October 3, 1917, and section 407 of the capital-stock tax act of September 8, 1916, contain language similar in effect. Section 200 of the war excess-profits tax act of October 3, 1917, specifying that when used therein "the term 'corporation' includes joint-stock companies or associations and insurance companies," provides for a tax "upon the income of every corporation, partnership, or individual."

Article 62 of the income-tax regulations classes limited partnerships as corporations for the purpose of the income-tax and requires income from the earnings of such partnerships to be treated like dividends on corporate stock. Article 2 of the excess-profits tax regulations extends the term "corporation" to include limited partnerships.

So far as limited partnerships of the type of partnerships with limited liability or partnership associations authorized by the statutes of Pennsylvania and of a few other states are concerned, no reason exists for changing the regulations. Such so-called limited partnerships, offering opportunity for limiting the liability of all the members, providing for the transferability of partnership shares, and capable of holding real estate and bringing suit in the common name, are more truly corporations or joint-stock companies than partnerships.

But the regulations require revision with respect to limited partnerships of the type authorized by the statutes of New York and most of the states. Such limited partnerships, which cannot limit the liability of the general partners, although the special partners enjoy limited liability so long as they observe the statutory conditions, which are dissolved by the death or attempted transfer of the interest of a general partner, and which can not take real estate or sue in the partnership name, are so like common-law partnerships as to render inadvisable the differentiation hitherto existing in the regulations.

The same considerations apply to the classification of limited partnerships for the purpose of the capital-stock tax. It is immaterial that partnerships with limited liability of the Pennsylvania type may not issue stock. They have capital stock and the interests of the members are shares within the meaning of the statute, stock certificates being mere evidences of ownership.

Therefore, for the purpose of the income tax, the war income tax, the excess-profits tax and the capital-stock tax, limited partnerships of the Pennsylvania type of partnerships with limited liability are corporations or joint-stock companies, and limited partnerships of the New York type are partnerships. Article 62 of the income-tax regulations and article 2 of the excess-profits tax regulations are modified accordingly. However, in doubtful cases limited partnerships will be treated as corporations unless they submit satisfactory proof that they are not in effect so organized.

(T. D. 2715, May 20, 1918)

Income Tax

Revision of articles 83 and 84 of the income-tax regulations regarding interest upon the obligations of a state or any political subdivision thereof

Section 4 of the income-tax act of September 8, 1916, as amended by the act of October 3, 1917, provides that the following income shall be exempt from the income tax:

Interest upon the obligations of a state or any political subdivision thereof.

In order more clearly to define this exemption articles 83 and 84 of the income-tax regulations, as revised, are hereby amended to read as follows:

Art. 83. *Obligations of a state.*—Among income exempt from the income tax is interest upon the obligations of a state or any political subdivision thereof. Obligations issued for a public purpose by or on behalf of the state or a duly organized political subdivision acting by constituted authorities duly empowered to issue such obligations are the obligations of a state or a political subdivision thereof.

Art. 84. *Political subdivisions.*—The term "political subdivision" denotes any division of the state made by the proper authorities thereof acting within their constitutional powers for the purpose of carrying out a por-

tion of those functions of the state which by long usage and the inherent necessities of government have always been regarded as public. Political subdivisions of a state, within the meaning of the exemption referred to in article 83, include special assessment districts so created such as road, water, sewer, gas, light, reclamation, drainage, irrigation, levee, school, harbor port improvement, and similar districts and divisions of a state.

(T. D. 2716, May 28, 1918)

Income Tax

Amending article 35, regulations No. 33, revised, by defining foreign items, and regulating the furnishing of information as to such items by the bank or agency collecting the same, and by the fiscal agent of the foreign country or foreign corporation making the payment.

1. Article 35, regulations No. 33, revised, is hereby amended to read as follows:

Article 35. Such returns of information shall be required, regardless of amount, in the case of payments of interest upon bonds, mortgages, or deeds of trust or other similar obligations of domestic or resident corporations, joint-stock companies, associations, and insurance companies, and in the case of foreign items. The original ownership certificates, when duly filed, shall constitute and be treated as returns of information.

The term "foreign item," as used in this article means any dividend upon the stock of a foreign corporation, or any item of interest upon the bonds of foreign countries or nonresident foreign corporations, whether or not such dividend or interest is paid in the United States, or by cheque drawn on a domestic bank. The term "foreign corporation," as used in this article, means one not organized and existing under the laws of the United States or of any state or territory thereof, or of the District of Columbia, Porto Rico, or the Philippine Islands. The term "nonresident foreign corporation," as used in this article, means any foreign corporation which has no office or place of business in the United States. The mere maintenance of an office, or fiscal agency, in the United States for the payment of dividends on stock or interest on bonds, does not constitute a foreign corporation a "resident" of the United States within the meaning of this article.

The first bank or agency accepting a foreign item for collection is required to make a return of information concerning the same. Whenever a foreign country or foreign corporation making payment of foreign items has a fiscal agent in this country, such agent, when requested by the commissioner of internal revenue, shall furnish whatever information he has in relation to such items. A dividend-disbursing agent is deemed to be such a fiscal agent.

Banks or agencies collecting foreign items are required to obtain a license from the commissioner of internal revenue to engage in such business, and are subject to such regulations for the furnishing of information as said commissioner, with the approval of the secretary of the treasury, shall prescribe, and to the penalties prescribed for failure to obtain such license (act of Sept. 8, 1916, sec. 9 (f), as amended by act of Oct. 3, 1917, sec. 1205). A blank application (form 1017) for such a license may be obtained upon request, from any collector of internal revenue. This license is issued without cost.

Such foreign items shall not be accepted for collection by any bank or collecting agency so licensed unless accompanied by proper ownership certificates (form 1001-A) showing names and addresses of the owners, and all other information called for thereon. The licensee is also required to indorse upon such item the words "certificate detached and information furnished," adding his name and address. When foreign items have been indorsed as above prescribed, the certificates shall be detached and forwarded to the commissioner of internal revenue (sorting division), Wash-

ington, D. C., on or before the 20th day of the month following that during which the items were accepted, accompanied by a letter of transmittal, showing the number of certificates, and the aggregate amount of foreign items disclosed thereon.

2. For the purpose of complying with the above requirements, a certificate (form 1001-A), will be provided by the government and furnished to collectors of internal revenue for distribution to the public. The certificate shall be in the following form:

FOREIGN ITEMS

Form 1001-A
U. S. Internal Revenue. Names must be printed or written plainly.

Ownership certificate—Tax not to be paid at the source

(For the use of owners of stock of all foreign corporations, and owners of bonds of foreign countries or nonresident foreign corporations.)

PAYOR OF INTEREST OR DIVIDEND	OWNER OF BONDS OR STOCKS
Name..................................	Name..................................
Address..............................	Address..............................

....

(On line above give full description of foreign item, date of dividend, or maturity of interest.)

I certify that the owner of the bonds or stock upon which the above-described income accrued falls within the class of persons or organizations opposite which such income is entered, and is entitled to receive the income reported without deduction of tax.

(Signature of owner or agent.)

....

(Address of agent) ....
....

If owner is an individual, is he married?	If not, is he the head of a family? ....

Owner	Interest	Dividends
1. Citizen or resident of the United States, individual or fiduciary [1]	$....	$....
2. Domestic or resident corporation, association, or partnership	$....	$....
3. Nonresident alien individual	$....	$....
4. Nonresident foreign corporation, association, or partnership	$....	$....

Fiduciaries must enter under "Owner of bonds or stocks" the name of estate, trust or beneficiary on behalf of whom this certificate is made.

If securities are owned jointly by several persons, one may sign, and the names, addresses, and proportion of ownership of each indorsed on the back hereof.

[1] A responsible bank or banker may execute the certificate on behalf of a nonresident alien owner of stocks or bonds.

NOTE.—The first bank or collecting agent receiving this certificate is required to detach and forward it to the Commissioner of Internal Revenue (Sorting Division). Washington, D. C., accompanied by a letter of transmittal showing the number of certificates and the aggregate amount of foreign items disclosed thereon. When certificate is detached, the collecting agent shall endorse upon the foreign item, "Certificate detached and information furnished.."

(Name and address of licensee.)

Date..................

3. The use of form 1071, revised, is hereby discontinued.

All treasury decisions and other rulings by this office in conflict herewith are hereby superseded and repealed.

(T. D. 2718, May 28, 1918)

Certificates of indebtedness

Instructions relative to acceptance of certificates of indebtedness dated May 15 and maturing June 25, 1918, in payment of income and excess profits taxes

In accordance with the provisions of section 1010 of the act of October 3, 1917, and the instructions contained in T. D. 2639, dated January 28, 1918, collectors are directed to receive United States certificates of indebtedness dated May 15, 1918, and maturing June 25, 1918, at par and accrued interest in payment of income and excess profits taxes when payable at or before the maturity of the certificates.

Hereto attached is a schedule showing the exact amount of accrued interest payable on any day from May 15 to June 25, 1918.

Accrued interest upon United States certificates of indebtedness, dated May 15, 1918

[4 per cent. for 365 days]

	$500	$1000	$5000	$10000	$100000
May	$	$	$	$	$
15	0.00	0.00	0.00	0.00	0.00
16	.05	.11	.55	1.10	10.96
17	.11	.22	1.10	2.19	21.92
18	.16	.33	1.64	3.29	32.88
19	.22	.44	2.19	4.38	43.84
20	.27	.55	2.74	5.48	54.79
21	.33	.66	3.29	6.58	65.75
22	.38	.77	3.84	7.67	76.71
23	.44	.88	4.38	8.77	87.67
24	.49	.99	4.93	9.86	98.63
25	.55	1.10	5.48	10.96	109.59
26	.60	1.21	6.03	12.05	120.55
27	.66	1.32	6.58	13.15	131.51
28	.71	1.42	7.12	14.25	142.47
29	.77	1.53	7.67	15.34	153.42
30	.82	1.64	8.22	16.44	164.38
31	.88	1.75	8.77	17.53	175.34
June					
1	.93	1.86	9.32	18.63	186.30
2	.99	1.97	9.86	19.73	197.26
3	1.04	2.08	10.41	20.82	208.22
4	1.10	2.19	10.96	21.92	219.18
June	$	$	$	$	$
5	1.15	2.30	11.51	23.01	230.14
6	1.21	2.41	12.05	24.11	241.10
7	1.26	2.52	12.60	25.21	252.05
8	1.32	2.63	13.15	26.30	263.01
9	1.37	2.74	13.70	27.40	273.97
10	1.42	2.85	14.25	28.49	284.93
11	1.48	2.96	14.79	29.59	295.89
12	1.53	3.07	15.34	30.68	306.85
13	1.59	3.18	15.89	31.78	317.81
14	1.64	3.29	16.44	32.88	328.77
15	1.70	3.40	16.99	33.97	339.73
16	1.75	3.51	17.53	35.07	350.68
17	1.81	3.62	18.08	36.16	361.64
18	1.86	3.73	18.63	37.26	372.60
19	1.92	3.84	19.18	38.36	383.56
20	1.97	3.95	19.73	39.45	394.52
21	2.03	4.05	20.27	40.55	405.48
22	2.08	4.16	20.82	41.64	416.44
23	2.14	4.27	21.37	42.74	427.40
24	2.19	4.38	21.92	43.84	438.36
25	2.25	4.49	22.47	44.93	449.32

(T. D. 2720, June 4, 1918)

Income tax act of October 3, 1913—Decision of court

ASSOCIATION.

An organization according to whose constitution individuals who are beneficially interested in various proportions in the same property and hold assignable certificates representing their different interests therein. but who can claim no part of the income of such property as their income as distinguished from the income of the organization to which they belong, commit the control and management of such property, for profit, to trustees, free from their own immediate control or interference, except that such individuals may act by majority in amount and interest for the purpose of allowing extra compensation to the trustees, filling vacancies in the office of trustees or modifying the terms of the declaration of trust, is an "association" and taxable as such under section II G (a) of the act of October 3, 1913.

The appended decision of the United States circuit court of appeals for the first circuit in the cases of *Crocker et al., trustees, vs. John F. Malley, collector of internal revenue,* and of *John F. Malley, collector of internal revenue, vs. Crocker et al., trustees,* is published for the information of internal-revenue officers and others concerned.

UNITED STATES CIRCUIT COURT OF APPEALS, FIRST CIRCUIT. OCTOBER TERM, 1917. No. 1323. No. 1324

Alvah Crocker et al., trustees, plaintiffs in error, vs. John F. Malley, collector, defendant, defendant in error; John F. Malley, collector, defendant, plaintiff in error, vs. Alvah Crocker et al., trustees, plaintiffs, defendants in error.

Error to the district court of the United States for the district of Massachusetts

Before Dodge, Johnson, and Aldrich, judges
[May 3, 1918]

Dodge, judge: These cases arise under the federal income tax act, approved October 3, 1913 (38 Stats. 166, 172).

The five persons who were then the trustees under a declaration of trust dated March 29, 1912, and recorded in the Worcester county, Massachusetts, northern district, registry of deeds, brought suit on January 15, 1917, against the collector of internal revenue to recover back certain amounts paid by them to him under protest, as income taxes claimed by him to be due from them under said act, for the years 1913, 1914, and 1915. The case was heard in the district court without a jury on an agreed statement of facts. The trustees recovered judgment for $9,554.07, with interest, which judgment the collector seeks to reverse in No. 1324, asserting that the allowance of any recovery was error. By their writ of error in No. 1323, the trustees assert the judgment to have been erroneous in not allowing also the further recovery of $1,321.33, included in their total claim as stated in their declaration. Neither party disputes the finding below that all the formalities required by the statute to enable the plaintiffs to bring this suit have been complied with.

The declaration of trust provided that "the title of this trust (fixed for convenience) shall be The Wachuset Realty Trust." The important features of the trust thereby created are set forth as follows in the "Opinions and Findings" of the district court:

The trust was created under the common law. In its inception there were five trustees and eight beneficiaries, five of whom were trustees. The property of the trust consisted of real estate and shares of stock in a Massachusetts corporation the legal title to which was vested in the trustees. The real estate was leased to the Massachusetts corporation, and the income from the trust came from the dividends on the stock and the rentals of the real estate. Certificates were issued by the trust to the beneficiaries in proportion to their respective interests in the property held by the trust. The certificates contained a provision signifying the assent of the beneficiaries to the terms of the trust agreement.

* * * * * *

According to the trust agreement, the trust was to continue for 20 years from and after the death of the survivor of certain persons named, when the property was to be converted into money and the net proceeds distributed among the persons then holding and owning the beneficial interests therein. Pending final conversion and distribution of the property full management and control of the same was vested in the trustees, with as full powers as though they were themselves sole and absolute beneficial owners thereof in fee simple.

They were authorized to collect and receive all rents and incomes from the property and semi-annually or oftener to distribute such portion thereof as they, in their discretion, should determine to be fairly distributable as income to the several *cestui que* trusts, according to their interests. The compensation of the trustees was not to exceed a total of one per cent., reckoned upon the gross income received, "unless, at any time, a majority in interest of the *cestui que* trusts consent in writing to some larger compensation for any past service." Any vacancies in the office of trustee were to be filled by the remaining trustees by an instrument in writing signed by them and assented to in writing by the holder or holders of a majority in amount of the beneficial interests in the trust; and the terms and provisions of the trust could be modified at any time by an instrument in writing, signed, sealed, and acknowledged "by the then trustees, assented to in writing by a majority in interest of the *cestui que* trusts." It was also stipulated that the *cestui que* trusts should "be trust beneficiaries only, without partnership, associate, or any other relation whatever *inter sese*."

The district court has stated the question upon which the trustees' right of recovery depends as follows:

The principal question in the case is whether the plaintiffs are trustees and subject to the tax provisions of section II, subdivision D, of the act of October 3, 1913, or whether they are an association within section II, subdivision G (a), of said act. The contention of the defendant is that the plaintiffs are an association and taxable under the provisions of subdivision G, while that of the plaintiffs is that they are a strict trust, not an association or partnership, and are subject to the tax provisions of subdivision D.

This question was resolved by the district court in favor of the plaintiffs, and the case decided upon the ground that they are a trust and not an association.

Under the corporation excise tax statute of 1909 (36 Stats., 11, 112) every corporation, joint-stock company, or association organized for profit and having a capital stock represented by shares, now or hereafter organized under the laws of the United States or of any state or territory, etc., was made subject, if engaged in business in any state, etc., to pay annually a special excise tax with respect to the carrying on or doing business by it, of 1 per cent. upon its entire net income over and above $5,000 received by it from all sources during the year.

In *Eliot vs. Freeman*, 220 U. S., 178, it was held with regard to two Massachusetts real estate trusts, more or less similar in character to the trusts here under consideration, that they were not within the provisions of the act nor liable to the excise tax thereby imposed because formed in a state where statutory joint-stock companies are unknown and not therefore deriving either from the laws of the United States or of any state or territory, etc., any quality or benefit not existing at the common law. The intention of congress was held to have been to embrace within the statute only such corporations and joint-stock associations as were organized under some statute or did derive from that source some quality or benefit not existing at the common law.

This decision was in 1911. The language of the subsequently enacted income tax statute of 1913 imposes the normal tax therein provided for upon the entire net income of every corporation, joint-stock company, or association organized in the United States, no matter how created or organized.

If therefore, The Wachuset Realty Trust is a joint-stock company or association, within the meaning of those terms as used in section II, G (a), of the statute of 1913, it makes no difference whether it is created or organized under any statute or not. Being organized in the United States, its income is liable to the tax imposed, although it derives no benefit not existing at common law from any statutory source. The question remains,

however, whether or not the facts before the district court required the finding that it was a "joint-stock association" or "association" such as the above section intends. We find no indication in *Eliot vs. Freeman* or in any other supreme court decision that a Massachusetts trust like those before the court in that case must necessarily be regarded as such an "association" in the statutory sense. On the collector's behalf it is said that in the legislation of 1913 congress "intentionally omitted the one requirement which exempted such an organization" under the legislation of 1909. But we think it by no means clear from anything said in the opinion that either trust before the court in *Eliot vs. Freeman* must have been held an "association" in the statutory sense, had it only been organized under some statute expressly permitting such organization. In the opinion it is expressly said, as to the trusts then under consideration, that they could "hardly be said to be organized within the ordinary meaning of that term" (220 U. S., 186), and it was pointed out (at p. 187) that they did not have perpetual succession, but ended 20 years after lives in being—suggestions which would hardly have been made if the decision was meant to be understood as contended.

With regard to the statute of 1909 it is to be noticed that while corporations, joint-stock companies, or associations and insurance companies, were therein classed together as they are in the statute of 1913—the former statute, unlike the latter, imposed upon them not a tax upon their incomes as such, but a "special excise tax with respect to the carrying on or doing business by them," equivalent to 1 per cent. upon their net incomes in excess of $5,000. Upon partnerships, not capable of being included in said classification, the statute of 1909 did not undertake to impose any such tax, any more than upon individuals. The incomes of the partners from the business of an ordinary partnership congress could not have taxed in 1909, the sixteenth amendment not having become a part of the constitution until February 25, 1913.

The statute of 1913, however, imposes a tax directly upon net income, not a special excise tax equivalent to the same percentage. It imposes such tax directly upon the incomes of individuals and partnerships as well as those of corporations, joint-stock companies or associations, and insurance companies, according to provisions alike in principle as to all said incomes, however different as to matters such as the different amounts of exemptions or deductions allowed different classes of recipients. The provisions of section II, G (a), which subject the incomes of corporations, joint-stock companies or associations, and insurance companies to the tax are there expressly declared not applicable to partnerships. In section II, D, are found separate and distinct provisions which expressly direct that persons carrying on business in partnership shall be liable for income tax only in their individual capacities, and which regulate accordingly the returns of incomes required to be made by partnerships.

No provisions are found in the statute of 1913 which directly impose a tax upon incomes arising or accruing to fiduciaries, in terms corresponding to those whereby a tax is imposed upon incomes arising or accruing to individuals (Sec. II, A-1) or to corporations, joint-stock companies or associations, etc. (Sec. II, G-a). By section II, D, in a paragraph mainly devoted to setting forth requirements of annual returns from or on behalf of the various classes of recipients of taxable income, trustees, among other specified kinds of fiduciaries, "and all persons, corporations, or associations acting in any fiduciary capacity," are required to make such returns of "the net income of the person for whom they act, subject to this tax, coming into their custody or control and management, and be subject to all the provisions of this section which apply to individuals."

The provisions just referred to seem to be rather provisions for the assessment and collection of the taxes due from the different classes of recipients of incomes elsewhere directly taxed by the statute than provis-

ions creating still another class of recipients and imposing a tax upon incomes arising or accruing to them. Nowhere in the statute are incomes arising or accruing to fiduciaries declared subject as such to the provisions taxing incomes arising or accruing to individuals.

In view of the above features of the statute, the first question presented in determining its application to these trustees seems to be as follows: Is the income received by them during each calendar year from the property under their control to be considered income arising or accruing to the "persons for whom they act," or as income arising or accruing to them, notwithstanding that it is to be disposed of by them as the trust declaration requires? If it is to be regarded as income of the former description, i. e., as arising or accruing to the respective beneficiaries, the above provisions of section II, D, require an annual return of it from them, and they are liable to pay the tax imposed upon it by a clause in the same paragraph subjecting them to all the provisions of the section applicable to individuals; but under subsequent provisions of section II, D, they need not include in their returns so much of said income as is derived from dividends upon the stock forming part of the property under their control. But if said income is to be considered as "arising or accruing" to them rather than to the beneficiaries or certificate holders, none of the above provisions of section II, A, or of section II, D, seems to us applicable either to said income or to them. Though arising or accruing to them as trustees or title holders of the property from which it is derived, they do not, and could not, claim such income as their own in any individual capacity; and if they do not receive it as income subject to the tax because it has arisen or accrued to the several beneficiaries, it must be either income arising or accruing to them collectively as the receiving officers of their organization, and subject to the tax imposed by section II, G-a, upon incomes of the different class there dealt with, from which dividends may not be deducted, or income upon which no tax is imposed by any express and distinct provisions of the statute.

In order to make income from a trust estate received by the fiduciary in any calendar year income of the person for whom he acts, subject to the tax, in the sense of the above provisions of section II, D, it must be received by the fiduciary upon terms which make it income arising or accruing during that year to such person according to section II, A-1. If the terms of the trust are such that its receipt by the fiduciary immediately renders it, or so much of it as is net income, available as such to the beneficiary, no difficulty is found in regarding it as income of the person for whom the fiduciary acts, subject to the tax, coming into his custody or control and management, and therefore governed by said provisions of section II, D.

But by the terms of the trust here in question the receipt by the trustees during a given calendar year of income from the trust estate does not render any part of such income immediately so available to the beneficiaries as income arising or accruing to them during the year. Such receipt gives to no one of them any right to a share of what the trustees so receive as then belonging to him individually, or any right to direct the disposition of any such share according to his individual determination.

The plaintiffs were not required by the trust declaration under which they received the income from the trust estate for the calendar years here in question to distribute it, or any part of it, to the beneficiaries, as net income, at any time. The requirements as to distribution are only that they distribute such portion of the income received "as they may in their discretion determine to be fairly distributable net income." And they are given full authority from time to time to devote any funds on hand, whether received as capital or income, to repair, improvement, protection, or development of the property under their control, or to the acquisition of other property, as they "may determine to be wise and expedient for

the protection and development of the trust property as a whole pending its conversion and distribution." Further, their determination is expressly made final, if made by them in good faith, as to all questions as between capital and income.

No beneficiary of this trust, therefore, had the right, when the income for a given calendar year from the trust property came into the plaintiffs' hands, to demand any share of it or direct the disposition of any of it or even to have his individual share of it determined. To the plaintiffs, and not to their beneficiaries, belonged the right to say whether any of it should then go to the beneficiaries or whether all of it should become part of the trust property ultimately to be distributed. In such final distribution no one who was a beneficiary during the calendar year might live to share. While the value of his proportionate interest in the trust estate might be increased if income for the year went to augment said estate, his proportionate share in income so disposed of can hardly be called income arising or accruing to him as an individual during the year, in the ordinary sense. We think it may well be doubted whether income, received by the plaintiffs, subject to such independent power of disposition, or any part thereof, is income within the meaning of the language in section II, D, "the net income of the person for whom they act, subject to this tax, coming into their custody or control and management."

The plaintiffs' powers and functions as defined by the instrument under which they act resemble the powers and functions ordinarily exercised by the managers of an organization so constituted as to be of itself a recipient of taxable income independently of the individuals beneficially interested in the property from which it is derived, much more than they resemble the powers and functions of ordinary fiduciaries acting merely as such for ordinary beneficiaries. Particularly is this true as to income received from their trust estate. Until and unless, after its receipt, they have so exercised their discretion as to determine it, or some part of it, to be fairly distributable net income, no individual for whom they act can claim any part of it as his income, as distinguished from the income of the organization to which he belongs. The same is true of a corporation's income, in which stockholders can claim no individual right before the managers declare a dividend from it. The same would be true of a corporation, joint-stock company, or association which had given to its officers powers of disposition over its income like the above. The same would not be true in the ordinary cases of fiduciaries exercising, with regard to income, only the powers necessary for distributing net income as received to the persons for whom they act, such as we think were contemplated by the above provisions of section II, D.

It is true, as the agreed statement before us shows, that the plaintiffs "have disbursed such income" as they have from time to time received from the real estate and stock which they hold, "less charges and disbursements for taxes and similar expenses, to their several beneficiaries in proportion to their respective interests." This we understand to mean that they have distributed so much of the income received by them during the calendar years here in question as they determined in their discretion to be fairly distributable net income; according to clause 3 of the declaration of trust. But in said distributions the respective beneficiaries can hardly be said to have got what they received because it had arisen or accrued to each of them during the year; or the plaintiffs to have been performing only the duty of paying over net incomes so arising or accruing. Each beneficiary took what he received, not because it was his net income so arising or accruing, but because the plaintiffs had elected to treat what they distributed as "fairly distributable net income," instead of accumulating it as they might have done.

The district court, as its opinion states, held the plaintiffs to be "a trust" subject to the provisions of section II, D, and not "an association,"

in deference to the decisions in *Williams vs. Milton,* 215 Mass. 1; *Crocker vs. Crocker,* previously decided in the district court (May 23, 1914), and the authorities whereupon those decisions were based. *Crocker vs. Crocker* required construction by the court of the same trust declaration as is now before us. The bill in that case, filed by one of the beneficiaries, asked the court to enjoin the present plaintiffs from making a return of income taxable under this statute according to section II, G-a, thereof.

We agree with the district court, in this case and in *Crocker vs. Crocker,* that the organization formed under this trust declaration is not, in view of the authorities, to be regarded as an association in such sense as to make the beneficiaries partners and the plaintiffs their agents for conducting the partnership business. Its income, therefore, for the calendar years in question, is not for the purpose of the statute to be treated as income of a partnership. If it were to be so treated it would be income arising or accruing to the several partners and subject to the provisions of section II, D, regarding such income. Nor could the organization be regarded as belonging to either of the classes mentioned in section II, G-a, because the language there used expressly excludes partnerships.

But although their beneficiaries stood, neither as to the trust property nor as to the profits of its control and management, nor as to the income therefrom, as partners, but only as beneficiaries of a strict trust; and although the plaintiffs were not the agents or representatives of a partnership, but trustees in whose management and control of the trust property and business the beneficiaries had no direct voice, we do not think it necessarily follows that the organization composed of themselves and the individuals for whose benefit they act can not be called an "association" for the purposes of section II, G-a. Though not associated as partners, we fail to see why they may not reasonably be said to be associated in the sense contemplated by the statute. As pointed out above, the statute, for the purposes of the taxation which it imposes, broadly distinguishes between two classes of income only—that which does and that which does not arise or accrue to individuals as opposed to groups or bodies of individuals.

The plaintiffs fail to satisfy us that the terms "voluntary association" or "association" are entirely inapplicable for any purpose to an organization according to whose constitution individuals beneficially interested in various proportions in the same property commit its control and management, for profit, to trustees free from their own immediate control or interference. However important it may be to distinguish between a trust under which there is no partnership relation among the beneficiaries and an association under which such relation exists for the purposes of systems of taxation such as that of Massachusetts (*Williams vs. Milton,* 215 Mass., 1), or for the purposes of statutes such as that construed in *Smith vs. Anderson,* 50 L. J. Ch., 39; it does not seem to us that the distinction so made necessarily excludes an organization like this from the general class of organizations to which the terms "voluntary association" or "association" may properly be applied. The holders of the assignable certificates representing the different beneficial interests in this "trust" may certainly be described, without using language in any extraordinary or unusual sense, as associated together for their common benefit or profit. Their individual interests in the trust property are combined for the purposes of a joint business venture managed for the common benefit of all. The trust declaration in effect associates them for the purposes of allowing extra compensation to the trustees, of filling vacancies in the office of trustees, or of modifying the terms of the declaration itself when it requires for those purposes written assent from a "majority in amount" or a "majority in interest."

Believing, in view of the entire scheme for taxation of incomes as established by this statute, that the legislative intent as to incomes such as these plaintiffs have received was to treat them as arising or accruing to

the trustees collectively, rather than to the individual beneficiaries for whose ultimate benefit they were received, we are obliged to hold that the taxes for the years here in question were lawfully assessed and collected, and that the district court erred in its decision to the contrary. This conclusion renders it unnecessary to consider the questions which would have had to be decided upon the plaintiffs' writ of error No. 1323 had we agreed with the district court.

In No. 1323 the writ of error is dismissed, and the defendant in error recovers his costs of appeal.

In No. 1324 the judgment of the district court is reversed, and the case is remanded to that court with directions to enter judgment for the defendant, and the plaintiff in error recovers his costs of appeal.

(T. D. 2721, June 4, 1918)

Corporation excise tax act of 1909—Decision of the supreme court

1. Nature of iron-ore leases.

   Iron-ore leases of the kind under consideration are not conveyances of the ore in place, but are grants of the privilege of entering upon, discovering, and developing and removing the minerals from the land.—The *Sargent Land Co.* case (242 U. S., 503) followed.

2. Depletion of capital assets.

   The lessee of mining property may not deduct the proportionate value of the ore in place on January 1, 1909, with respect to each ton of ore mined, as so much depletion of capital assets, but may deduct a proportionate part of the royalty paid in advance.

(T. D. 2722, June 4, 1918)

Corporation excise tax act of 1909—Decision of the supreme court

1. Depletion of ore bodies.

   For the purpose of determining its net income for the basis of taxation under the act, a mining corporation is not entitled to deduct from its gross income any amount whatever on account of depletion or exhaustion of ore bodies caused by its operations for the year for which the tax is assessed.

2. Deduction of cost value of ore in ground.

   In the ascertainment of its net income under the act, a mining corporation is not entitled to a deduction against gross proceeds from the mining and treatment of ores to the extent of the cost value of the ore in the ground before it was mined, ascertained in compliance with T. D. 1675.

(T. D. 2723, June 4, 1918)

Corporation excise tax act of 1909—Decision of the supreme court

1. Purpose of the act.

   The legislative purpose was not to tax property as such or the mere conversion of property, but to tax the conduct of the business of corporations organized for profit by a measure based upon the gainful returns from their business operations and property from the time the act took effect.

2. Treatment of proceeds of conversion of capital assets.

   The suggestion that the entire proceeds of the conversion of capital assets should be still treated as the same capital, changed only in form and containing no element of income, although including an increment of value, is inconsistent with the general purpose of the act.

3. Meaning of "income."

   "Income" imports, as used in the act, something entirely distinct from principal or capital either as a subject of taxation or as a measure of

the tax, conveying rather the idea of gain or increase arising from corporate activities.

4. Determination of gain or loss.

In order to determine whether there has been gain or loss and the amount of the gain, if any, an amount must be withdrawn from the gross proceeds of sale sufficient to restore the capital value that existed on December 31, 1908, notwithstanding any increment of value up to that time had not been entered upon the plaintiff's books of account.

5. Sales of timber.

The gain on a sale of timber acquired by a lumber manufacturing company before January 1, 1909, and converted into money after that date, is income within the meaning of the act, but only such portion of the gain as accrued subsequent to December 31, 1908, is taxable.

(T. D. 2724, June 4, 1918)

Corporation excise tax act of 1909—Decision of the supreme court

1. The act of March 2, 1867, distinguished.

The act of March 2, 1867, with certain exceptions, taxed only such gains or profits as might be realized from a business transaction begun and completed during the preceding year, but the language of the act of 1909 is different in material particulars.—*Gray vs. Darlington* (15 Wall, 63), which construed the former act, is accordingly not controlling.

2. Construction of the act.

The act measured the tax by the income received within the year for for which the assessment was levied, whether it accrued within that year or in some preceding year while the act was in effect; but it excluded all income that accrued prior to January 1, 1909, although afterwards received while the act was in effect.

3. Computation of gain.

The sale of stock resulted in a gain or profit to the extent of the difference between the buying and selling prices, there being no merit in the contention that interest should be added to the purchase price in order to ascertain its cost, and so much of the profits as may be deemed to have accrued subsequent to December 31, 1908, must be treated as a part of the gross income of the respondent.

4. Determination of value of capital assets on December 31, 1908.

Whether the determination of the value of the capital assets on December 31, 1908, should be made by taking an inventory upon the basis of market values then existing, or whether the entire increment accruing between the time of acquiring and the time of disposing of the assets should be prorated as if it had arisen through a series of gradual and imperceptible augmentations, is a matter of detail, to be settled according to the best evidence obtainable and in accordance with valid departmental regulations.

(T. D. 2725, June 4, 1918)

Corporation excise tax act of 1909—Decision of the supreme court

1. Profit upon sale of corporate stock.

A railroad corporation purchasing stock in another corporation for investment prior to January 1, 1909, is taxable with respect to so much of the profit upon a sale of the stock as accrued after December 31, 1908.

2. Determination of value of stock on December 31, 1908.

The market value of the stock on December 31, 1908, may be determined by an inventory taken as of that date, and the stipulated fact of the market value of the stock on that date may be accepted as supplying the lack of an inventory.

Income Tax Department

(T. D. 2726, June 4, 1918)

Income tax act of October 3, 1913,—Decision of the supreme court

1. Effect of sixteenth amendment.
   The sixteenth amendment to the constitution of the United States does not extend the taxing power to new or excepted subjects, but merely removes all occasion which otherwise might exist for an apportionment among the states of taxes laid on income, whether it be derived from one source or another.
2. Nature of tax.
   The tax is not laid on articles in course of exportation or on anything which inherently or by the usages of commerce is embraced in exportation or any of its processes, but on the contrary is a general tax.
3. Net income from exportation taxable.
   The net income from the venture of exportation when completed, that is to say, after the exportation and sale are fully consummated, is subject to taxation under general laws.
4. Judgment affirmed.
   The judgment of the district court is affirmed.

The appended decision of the United States supreme court in the case of *William E. Peck & Co. (Inc.) vs. John Z. Lowe, jr.*, collector of internal revenue, is published for the information of internal-revenue officers and others concerned.

SUPREME COURT OF THE UNITED STATES. No. 234. OCTOBER TERM, 1917.

William E. Peck & Co. (Inc.), plaintiff in error, vs. John Z. Lowe, jr., collector, etc.

In error to the district court of the United States for the southern district of New York
[May 20, 1918]

Mr. Justice Van Devanter delivered the opinion of the court:

This was an action to recover a tax paid under protest and alleged to have been imposed contrary to the constitutional provision (art. 1, sec. 9, cl. 5) that "No tax or duty shall be laid on articles exported from any state." The judgment below was for the defendant. (234 Fed., 125.)

The plaintiff is a domestic corporation chiefly engaged in buying goods in the several states, shipping them to foreign countries, and there selling them. In 1914 its net income from this business was $30,173.66 and from other sources $12,436.24. An income tax for that year, computed on the aggregate of these sums, was assessed against it and paid under compulsion. It is conceded that so much of the tax as was based on the income from other sources was valid, and the controversy is over so much of it as was attributable to the income from shipping goods to foreign countries and there selling them.

The tax was levied under the act of October 3, 1913 (c. 16, Sec. II, 38 Stat., 166, 172), which provided for annually subjecting every domestic corporation to the payment of a tax of a specified per centum of its "entire net income arising or accruing from all sources during the preceding calendar year." Certain fraternal and other corporations, as also income from certain enumerated sources, were specifically excepted, but none of the exceptions included the plaintiff or any part of its income. So, tested merely by the terms of the act, the tax collected from the plaintiff was rightly computed on its total net income. But as the act obviously could not impose a tax forbidden by the constitution, we proceed to consider whether the tax, or rather the part in question, was forbidden by the constitutional provision on which the plaintiff relies.

The sixteenth amendment, although referred to in argument, has no real bearing and may be put out of view. As pointed out in recent decisions, it does not extend the taxing power to new or excepted subjects, but merely removes all occasion which otherwise might exist, for an apportionment among the states of taxes laid on income, whether it be derived from one source or another. *Brushaber vs. Union Pacific R. R. Co.* (240 U. S., 1, 17-19); *Stanton vs. Baltic Mining Co.* (240 U. S., 103, 112-113).

The constitution broadly empowers congress not only "to lay and collect taxes, duties, imposts and excises," but also "to regulate commerce with foreign nations." So, if the prohibitory clause invoked by the plaintiff be not in the way, congress undoubtedly has power to lay and collect such a tax as is here in question. That clause says "No tax or duty shall be laid on articles exported from any state." Of course it qualifies and restricts the power to tax as broadly conferred. But to what extent? The decisions of this court answer that it excepts from the range of that power articles in course of exportation, *Turpin vs. Burgess* (117 U. S., 504, 507); the act or occupation of exporting, *Brown vs. Maryland* (12 Wheat., 419, 445); bills of lading for articles being exported, *Fairbanks vs. United States* (181 U. S., 283); charter parties for the carriage of cargoes from state to foreign ports, *United States vs. Hvoslef* (237 U. S., 1); and policies of marine insurance on articles being exported—such insurance being uniformly regarded as "an integral part of the exportation" and the policy as "one of the ordinary shipping documents," *Thames and Mersey Ins. Co. vs. United States,* 237 U. S., 19. In short, the court has interpreted the clause as meaning that exportation must be free from taxation, and therefore as requiring "not simply an omission of a tax upon the articles exported, but also a freedom from any tax which directly burdens the exportation." *Fairbanks vs. United States,* supra, pages 292-293. And the court has indicated that where the tax is not laid on the articles themselves while in course of exportation the true test of its validity is whether it "so directly and closely" bears on the "process of exporting" as to be in substance a tax on the exportation. *Thames and Mersey Ins. Co. vs. United States,* supra, page 25. In this view it has been held that the clause does not condemn or invalidate charges or taxes, not laid on property while being exported, merely because they affect exportation indirectly or remotely. Thus a charge for stamps which each package of manufactured tobacco intended for export was required to bear before removal from the factory was upheld in *Pace vs. Burgess,* 92 U. S., 372, and *Turpin vs. Burgess,* 117 U. S., 504; and the application of a manufacturing tax on all filled cheese to cheese manufactured under contract for export, and actually exported, was upheld in *Cornell vs. Coyne,* 192 U. S., 418. In that case it was said, page 427: "The true construction of the constitutional provision is that no burden by way of tax or duty can be cast upon the exportation of articles, and does not mean that articles exported are relieved from the prior ordinary burdens of taxation which rest upon all property similarly situated. The exemption attaches to the export, and not to the article before its exportation."

While fully assenting and adhering to the interpretation which has been put on the clause in giving effect to its spirit as well as its letter, we are of opinion that to broaden that interpretation would be to depart from both the spirit and letter.

The tax in question is unlike any of those heretofore condemned. It is not laid on articles in course of exportation or on anything which inherently or by the usages of commerce is embraced in exportation or any of its processes. On the contrary, it is an income tax laid generally on net incomes. And while it can not be applied to any income which congress has no power to tax (see *Stanton vs. Baltic Mining Co.,* supra, p. 113), it is both nominally and actually a general tax. It is not laid on income from exportation because of its source, or in a discriminative way,

but just as it is laid on other income. The words of the act are "net income arising or accruing from all sources." There is no discrimination. At most, exportation is affected only indirectly and remotely. The tax is levied after exportation is completed, after all expenses are paid and losses adjusted, and after the recipient of the income is free to use it as he chooses. Thus what is taxed—the net income—is as far removed from exportation as are articles intended for export before the exportation begins. If articles manufactured and intended for export are subject to taxation under general laws up to the time they are put in course of exportation, as we have seen they are, the conclusion is unavoidable that the net income from the venture when completed, that is to say, after the exportation and sale are fully consummated, is likewise subject to taxation under general laws. In that respect the status of the income is not different from that of the exported articles prior to the exportation.

For these reasons we hold that the objection urged against the tax is not well grounded.

Judgment affirmed.

Students' Department

EDITED BY SEYMOUR WALTON, C.P.A.

(ASSISTED BY H. A. FINNEY, C.P.A.)

PARTNERSHIP LIQUIDATION

Editor, Students' Department:

Will you please explain the method to be followed in winding up the affairs of a partnership? I am particularly interested in the principles which should be followed to assure the proper distribution of the assets among the partners, and also in the ratio to be used in making periodical payments to partners. How can the liquidator be sure that he will not overpay one partner when he makes a distribution of cash before all of the losses are known?

Yours very truly, C. W.

It is assumed that "winding up the affairs" means that the business is discontinued as well as the partnership terminated, and not merely that a sale is made of the business as a going concern. The following reply is based on this assumption. When the business is discontinued, the assets must be realized and any profit or loss on such realization must be properly apportioned among the partners; the liabilities to outside creditors must be liquidated; and finally the liabilities to partners must be liquidated. The following principles should be followed:

As to realization:

Divide profits or losses among the partners in their profit and loss ratio. Emphasis cannot be placed too strongly on the necessity of making this profit and loss adjustment before paying the partners, because failure to do so would result in an improper settlement among the partners. Such losses or gains should be distributed in the profit and loss ratio, not in the capital ratio. This principle is emphasized because of a tendency to assume that different ratios should govern the distribution of profits or losses which become apparent during operation and the distribution of profits or losses which become apparent at the time of dissolution. This tendency arises from the assumption that the agreed ratios apply to operations only, and that losses disclosed by realization are losses of capital and hence should be borne in the capital ratio.

Analysis shows the error of this assumption. All losses are losses of capital, irrespective of when they become apparent. Moreover, any variation between book value and realization value of assets may be only the disclosure of a difference in value inherent in the assets and arising from operation. For instance, the collection of an account receivable with a resulting loss merely evidences the fact that a sale, which is an element of operation, resulted in a loss of capital.

As to liquidation:

Payments should be made in the following order of preference:

Outside creditors;
Partners' loans;
Partners' capitals.

Payments should be made on partners' capitals in the capital ratio at the time of making the dividend—that is, after realization losses have been charged off. There are some exceptions to the rule of making payments on capital ratios. These exceptions will be discussed hereafter. Generally speaking, the capital ratio should be followed only in case all the assets have been realized and all possible losses have been ascertained before making the dividend to the partners.

The following example illustrates the method of making settlement when all assets have been realized and all losses ascertained, the losses not being excessive enough to exhaust any partner's capital. The following condensed trial balance shows the condition of the affairs of the partnership before realization begins:

Trial balance

A capital		12,000
B capital		8,000
Accounts payable		5,000
Assets	25,000	
	25,000	25,000

The assets of $25,000 were sold for $21,000, and it is required to make a proper distribution of the cash.

The first step is to divide the loss resulting from realization between the partners. Since there was no stated agreement, it must be assumed that losses are to be borne equally, with the following results:

Capital accounts

	A	B	Total
Balances before realization	12,000	8,000	20,000
Realization loss	2,000	2,000	4,000
Balance after realization	10,000	6,000	16,000

Having adjusted the losses, the cash would be divided as follows:

Cash

Accounts payable	5,000
A capital	10,000
B capital	6,000
Total realized	21,000

The failure to apply the two rules of dividing losses in profit and loss ratio and making payments on resulting capital ratios frequently leads to inequitable settlements. Some of these incorrect methods are so often used by students that it seems desirable to illustrate them.

One cause of error lies in the assumption that realization losses are to be borne in capital ratios. Since A's and B's capitals before realization stood in the ratio of 3/5 and 2/5, the erroneous distribution of loss and cash would be as follows:

Capital accounts

	A	B	Total
Balances before realization	12,000	8,000	20,000
Loss on capital ratio	2,400	1,600	4,000
Balances and cash payments	9,600	6,400	16,000
Balances and payments should be	10,000	6,000	16,000

A, having been charged with $400 excess loss, would receive $400 less cash than he was entitled to, with a corresponding benefit to B.

Another cause of error lies in the assumption that the cash is to be divided in the original capital ratios, without any consideration of the losses. The effect of this method is to divide the losses automatically in the capital ratio, as shown in the following statement:

Capital accounts

	A	B	Total
Original balances	12,000	8,000	20,000
Cash, in original capital ratio	9,600 (3/5)	6,400 (2/5)	16,000
Balances (loss)	2,400	1,600	4,000
Losses should be	2,000	2,000	4,000

Another cause of frequent error lies in the division of the cash in the profit and loss ratio. This method is based on a false assumption that a division of cash in the profit and loss ratio is equivalent to dividing the losses in the agreed ratio. The fallacy of this opinion is shown by the following statement:

Capital accounts

	A	B	Total
Original balances	12,000	8,000	20,000
Cash (on profit and loss ratio)	8,000	8,000	16,000
Balance, loss	4,000	0	4,000

It will be noted that the division of cash in profit and loss ratios imposes all of the loss, in this case, on A.

It was stated above that there were exceptions to the rule of paying the partners in the capital ratio at the time of the dividend. Some of these exceptions will now be discussed.

When there are more than two partners and when one or more of their capital accounts have been reduced to a debit balance by reason of losses or drawings, the partner with a debit balance will of course not participate in the liquidating dividend. The partners with credit balances should not

be paid in their capital ratios, but should be paid down to their profit and loss ratios of the other capital debits. This is because there is a possibility that the capital debits will not be paid in, with the result that there will be further losses to be borne by the partners with capital credits. To illustrate, the assets shown in the following trial balance

Trial balance

			P. and L. ratios
A capital		20,000	50%
B capital		16,000	25%
C capital		4,000	25%
Liabilities		10,000	
Assets	50,000		
	50,000	50,000	

were sold for $29,200. The agreed division of the loss of $20,800 would be as follows:

Capital accounts

	A	B	C	Total
Original balances	20,000	16,000	4,000	40,000
Loss	10,400	5,200	5,200	20,800
Balances after realization	9,600	10,800		19,200
			1,200 Dr.	

If it is desired to distribute between A and B the $19,200 cash on hand before it is known whether C will pay in, the cash distribution must be made on the assumption that there is a possibility that the asset of C's debit balance will be uncollectible. In such an event the loss should be borne by A and B in their profit and loss ratio of 2/3 and 1/3. This is one of the cases in which the liquidator must safeguard himself by abandoning the capital ratio—he should pay A and B such arbitrary amounts as will reduce their capital accounts to their profit and loss ratios of the amount due from C. Since, by agreement, A should lose 2/3, or $800, and B should lose 1/3, or $400, in case the $1,200 is not collected, the payments should reduce their accounts to these balances as follows:

Cash distribution

	A	B	C	Total
Balances, as above	9,600	10,800	Dr. 1,200	19,200
Cash	8,800	10,400	0	19,200
	800	400	Dr. 1,200	0

If the capital ratio rule had been followed in this case, the payments to A and B would have been in the ratio of 96 to 108, or 8/17 to A and 9/17 to B, with the following results:

Cash distribution on capital ratio

	A	B	C	Total
Balances at time of dividend	9,600.00	10,800.00	Dr. 1,200.00	19,200.00
Dividend on capital ratio	9,035.29	10,164.71	0	19,200.00
Balances	564.71	635.29	Dr. 1,200.00	0

If C should fail to pay in his debit balance, A should pay B $235.29 to reduce B's loss to his agreed loss of $400. If A failed to make this payment, B could hold the liquidator for it, since it was the liquidator's overpayment to A which resulted in B's excessive loss. The method of paying down to the profit and loss ratio of C's debit balance safeguards the liquidator against this hazard.

It has been said that partners' loans should be paid before partners' capitals, but there is an exception to this rule covering cases where a partner has a capital debit and a loan credit. In such cases the right of offset may be applied, such a portion of the partner's loan being transferred to his capital as is necessary to make good the deficit in the latter account. To illustrate, the assets shown in the following trial balance

Trial balance

			P. and L. ratios
A capital		20,000	35%
B capital		20,000	35%
C capital		5,000	30%
C loan		5,000	
Accounts payable		10,000	
Assets	60,000		
	60,000	60,000	

were sold for $40,000. The following statement shows:

1. The distribution of the loss as agreed;
2. The offset of $1,000 from C's loan to his capital to make good the debit balance in the latter account;
3. The payment of liquidating dividends in the proper order of preference.

	A cap	B cap	C cap	C loan	Accts. pay.	Total
Per trial balance	20,000	20,000	5,000	5,000	10,000	60,000
1. Loss	7,000	7,000	6,000			20,000
Balances	13,000	13,000	Dr. 1,000	5,000	10,000	40,000
2. Offset			Cr. 1,000	Dr. 1,000		
Balances	13,000	13,000	0	4,000	10,000	40,000
3. Payments:						
First					10,000	10,000
Second				4,000		4,000
Third	13,000	13,000				26,000

It will be noted that only $1,000 was transferred from C's loan account to his capital account. While the payments to the three partners would have been the same in this case if C's entire loan had been transferred to his capital, such a transfer would have destroyed the evidence of the fact that the $4,000 due C was payable on account of loan, and hence took precedence of the payments to be made to A and B on capital accounts.

When the realization of assets requires a considerable period of time, it may be desirable to make liquidating dividends to the partners in periodical amounts. Such payments should not be made to the partners until the creditors have been paid in full or the liquidator will be responsible to creditors for any deficiency to them resulting from payments on capitals. When liquidating dividends are made to partners before realization is completed, the liquidator should bear in mind the possibility of losses on subsequent realizations, and should make his payments in such a way that he will not overpay any partner. When the partners bear losses in the capital ratios there is no danger of overpayment, but when the capital ratios and profit and loss ratios differ it is inevitable that at least one partner will have a profit and loss ratio in excess of his capital ratio, with the consequent possibility that future losses will more than exhaust his capital account. In such cases, if there is more than a remote possibility of heavy losses on future realization, the liquidator runs a risk of overpaying such a partner if the distribution is made in the capital ratios. Therefore the distribution of cash on capital ratios should be abandoned and the liquidator should use a method which will as nearly as possible reduce the capital accounts to the profit and loss ratio. After the capital accounts have been brought to the profit and loss ratio, subsequent liquidating dividends may be made on the capital ratio.

To illustrate, assume that the partnership conditions are as follows:

	A	B	C	D	Total
Capital ratios	25%	25%	25%	25%	100%
Profit and loss ratios	20%	25%	25%	30%	100%
Capitals	10,000	10,000	10,000	10,000	40,000
Loss on first realization	200	250	250	300	1,000
Balances at dividend	9,800	9,750	9,750	9,700	39,000
Cash	3,800	2,250	2,250	700	9,000
Balances	6,000	7,500	7,500	9,000	30,000

The above statement shows that at a time when the total capitals amounted to $40,000 a realization of assets amounting to $10,000 was made with a loss of $1,000. The loss is charged to the partners in the agreed ratio. The liquidator next considers the possibility that the entire $30,000 will be lost. In such an event this loss should be charged against the partners in the following amounts: A, $6,000; B, $7,500; C, $7,500; and D, $9,000. These amounts were determined by multiplying $30,000 by

each partner's profit and loss per cent. To insure each partner's ability to bear his proportion of any possible loss, the payments are made to reduce the capitals to these amounts.

It is often impossible to reduce the capitals to the profit and loss ratio at the first dividend. To illustrate the method to be followed in such cases, assume that four partners, each with an investment of $10,000, share profits in the ratios indicated in the following statement. In the realization of $10,000 of assets a loss of $1,000 is incurred. This loss is charged to the partners as follows:

Profit and loss ratio	18%	20%	22%	40%	100%
Partners	A	B	C	D	Total
Capitals	10,000	10,000	10,000	10,000	40,000
Loss	180	200	220	400	1,000
Balances	9,820	9,800	9,780	9,600	39,000

If the $9,000 cash is divided there will remain $30,000 of assets. Should a total loss occur, the charges to the partners on account of this loss should be as follows:

5,400	6,000	6,600	12,000	30,000

It will be noted that before the distribution of the $9,000, A, B and C have sufficient capital credits to provide for their portion of any possible loss. They should therefore participate in the cash distribution. But D, whose capital carries a credit of only $9,600, may be obliged to bear a loss of $12,000. Since his account is already inadequate to absorb his possible loss, the liquidator would be unwise further to deplete his account by allowing him to participate in the dividend.

But A, B and C cannot be paid down to the amounts of $5,400, $6,000 and $6,600 respectively, because there is not sufficient cash to do so and also because if a $12,000 loss should be charged against D and there should be a failure to collect the consequent debit balance of $2,400 from him, A, B and C would be required to absorb this loss in their profit and loss ratios. These three partners are therefore in danger of being charged with the following possible losses:

		A	B	C
Own portion of possible loss		5,400	6,000	6,600
Portion of D's possible debit balance				
D's share of possible loss	12,000			
D's capital account	9,600			
Possible uncollectible balance	2,400	720 ($\frac{18}{60}$)	800 ($\frac{20}{60}$)	880 ($\frac{22}{60}$
Total possible loss		6,120	6,800	7,480

As a safeguard to all partners and to the liquidator, the cash should be distributed as follows:

	A	B	C	D	Total
Balances (as above)	9,820	9,800	9,780	9,600	39,000
Cash	3,700	3,000	2,300		9,000
Balances (possible loss)	6,120	6,800	7,480	9,600	30,000

During a subsequent period $20,000 worth of assets was realized with a loss of $4,000. In distributing the $16,000 cash it is now possible to reduce the partners' accounts to their profit and loss sharing ratios as follows:

	A	B	C	D	Total
Balances (as above)	6,120	6,800	7,480	9,600	30,000
Loss	720	800	880	1,600	4,000
Balances	5,400	6,000	6,600	8,000	26,000
Cash	3,600	4,000	4,400	4,000	16,000
Balances (in profit and loss ratio)	1,800	2,000	2,200	4,000	10,000

The remaining assets were realized with a loss of $6,000, the distribution of the loss and the cash being shown below:

	A	B	C	D	Total
Balances (as above)	1,800	2,000	2,200	4,000	10,000
Loss	1,080	1,200	1,320	2,400	6,000
Balances	720	800	880	1,600	4,000
Cash	720	800	880	1,600	4,000

It may seem that the failure to include D in the first distribution, as well as the abandonment of the method of making distribution of dividends on capital ratios, may work an injustice to some partner. The following schedules of loss and cash distribution will show that the safeguarding of the liquidator and the three partners with loss sharing ratios which do not exceed their capital ratios as against D with a loss sharing ratio in excess of his capital ratio does not work any eventual injustice to any partner since each bears his proper proportion of the loss and receives his equitable portion of the cash.

Schedule of losses

	A	B	C	D	Total
Profit and loss ratios	18%	20%	22%	40%	100%
First realization	180	200	220	400	1,000
Second realization	720	800	880	1,600	4,000
Third realization	1,080	1,200	1,320	2,400	6,000
Total losses	1,980	2,200	2,420	4,400	11,000

Schedule of cash distributions

	A	B	C	D	Total
First dividend	3,700	3,000	2,300		9,000
Second dividend	3,600	4,000	4,400	4,000	16,000
Third dividend	720	800	880	1,600	4,000
Total	8,020	7,800	7,580	5,600	29,000

Verification

	A	B	C	D	Total
Initial capital	10,000	10,000	10,000	10,000	40,000
Losses (as above)	1,980	2,200	2,420	4,400	11,000
Cash (as above)	8,020	7,800	7,580	5,600	29,000

If D, or any of the other partners, should object to a liquidation of this sort, the liquidator might refuse to make any part dividends, but wait until all assets are realized and all losses ascertained.

Donated Real Estate

Editor, Students' Department:

Being under the impression that the *Students' Department* gives consideration and answers to problems put to it by subscribers, I respectfully request you to enlighten me as to certain points in the following case:

In January, 1916, the X company contracted with the chamber of commerce of G. H., Michigan, to move its office and manufacturing plant from Chicago to G. H., Michigan, upon the following considerations:

A. The chamber of commerce to deliver, at the end of seven years, deeds to land and buildings in G. H., Michigan (to be occupied by the X company upon moving) providing the X company had expended $250,000 in payrolls during this period of seven years;

B. The chamber of commerce to pay the company for additional equipment (up to $3,500) as fast as installed in the new location;

C. The chamber of commerce to pay the company for moneys spent in improving or altering the buildings to be occupied (up to $2,500);

D. Difference between amounts expended as above (B & C) and $7,000 to be paid the company when completely installed at G. H., Michigan.

Assets and liabilities of the company before moving were

Equipment	$28,000.00	
Accounts receivable	8,000.00	
Cash	3,000.00	
Stores	3,000.00	
Accounts payable		$1,000.00
Capital stock authorized and issued		30,000.00
Surplus		11,000.00
	$42,000.00	$42,000.00

In moving, the company spent $3,900.00 for freight and cartage and for labor dismantling the old plant. Machinery such as engines, boilers, dynamos, etc. (in use about three years) were left in place and abandoned at old location, to the value of $9,315.00 (purchase cost).

The X company, while in Chicago, did not own the building it occupied, but had entered into contract with another tenant of the same building to furnish power over a period of years. It was in consideration of the agreement by the owner of the building to assume this obligation to furnish power to the other tenant, that the machinery was left in place and abandoned.

In preparing the new location, from rather poor records available it appears that the company spent $21,500 for new equipment and for improvements and alterations on the buildings—amounts to building and to equipment were not kept separate, but were estimated to be $5,300.00 for building and $16,200.00 for equipment.

In closing the books for the year 1916, the following entries were made:

Dr. Surplus	$3,900.00	
Cr. Moving expenses		$3,900.00
Dr. Surplus	9,315.00	
Cr. Equipment		9,315.00
Equipment abandoned at Chicago.		
Dr. Surplus	3,000.00	
Cr. Plant and equipment		3,000.00

(Estimated cost of preparing plant at G. H., Michigan, for re-building and occupancy, such as tearing up floors, moving partitions, tearing down old walls before re-building, etc.)

Dr. Chamber of commerce	7,000.00	
Cr. Surplus		7,000.00

Because of the generally upset conditions occasioned by preparing to move, moving and getting settled in new location, the business made no profit in 1916, although it had been a paying proposition for eighteen years.

If the above case is stated plainly enough, will you kindly show how closing entries shown should have been made?

Would it be proper to make entries at the present time, charging some "asset" account or "deferred charges" account, and crediting "surplus" for the following:

1. Moving expense	$3,900.00
2. Machinery abandoned (less depreciation three years)	9,315.00
3. Preparing plant	3,000.00

so as to show these amounts on the balance-sheet as being part of the investment?

What would you name such an account? How would it eventually be wiped out—by crediting some "reserve" account? How would you record the building deal on the books at present? When the chamber of commerce finally delivers the deed, what would determine the amount the balance-sheet would show under "buildings"?

Is it not permissible to charge to "manufacturing expense" the expenses and losses mentioned above (1, 2 and 3) in yearly equal amounts, in place of "building" or "rent" cost?

Thanking you for any attention you may give the above, I am

Yours very truly,

READER.

One thing is certain: no value can be placed on the books for the property that is to be donated by the city of G. H. until the conditions are completely met. The question then is as to what entries are allowable in the meantime, and also what may be done at the end of the seven years, if the contract is fulfilled.

To determine what kind of entries to make it is necessary to analyze the transactions which the entries are to record. In this case the main object of moving from Chicago to G. H. was the acquisition of the title to a plant. The incentive to move was the value of the promised plant at the time of moving, not seven years later. Therefore, it is necessary to have the property appraised, or at least a value agreed upon, including the improvements.

Having fixed upon the value, all expenses incurred solely for the acquisition of the property will be the eventual cost of the property when title is obtained. It is true that it will not be known for seven years whether that cost is to become an asset or an expense, but no harm can be done if it is carried as a quasi or contingent asset. A good name for the account would be "contingent equity, G. H. plant." This account would be charged with

Moving expenses	3,900.00
Equipment abandoned	9,315.00
Building improvement and alteration	5,300.00
	18,515.00
and credited with payment by chamber of commerce	7,000.00
	11,515.00

This may be less, if depreciation is to be allowed on the abandoned equipment.

During the seven years, depreciation should be calculated on the appraised value of the new buildings and regularly charged as a manufacturing expense and credited to reserve for depreciation. The buildings must be treated on the hypothesis of eventual ownership, except taking credit for their full value.

However, in order to be on the safe side, enough of the surplus should be retained in the business to cover the cost of the property until title is acquired, and the surplus should be so earmarked. At present there would be little or no surplus, depending upon the amount of depreciation deducted from the charge for abandoned equipment. In the balance-sheet, therefore, there should be a note at the surplus account "appropriated for new plant."

No attention can be paid to the lack of profits in the year 1916. Failure to earn a profit is neither a loss nor an expense. As a matter of fact, the year in which the move took place will prove to have been a very profitable one when title to the property is acquired, but the realization of the profit is deferred seven years.

At the end of seven years, if all the conditions shall have been fulfilled, title to the property will be given to the company, which will then be authorized to enter the plant on its books as an asset. This would be done by charging plant account with the full value as appraised seven years before. The offsetting credit would be to "contingent equity, G. H. plant," to close out the balance of that account, and to surplus for the remainder. In future the note on the balance-sheet restricting the surplus would be omitted.

Surplus receives the credit for the excess of the value of the property over its cost, because it is not the profit of any one year but the accumulation of the seven years. It must be treated as a profit, although only part of it may be such. Part of it is unquestionably an offset against the poor results of the year in which the move was made. Part of it, however, may be clear profit to which the company is entitled in consequence of having rendered a service to the city of G. H., for which the latter considered the property fair payment.

Tire Guarantee

Editor, Students' Department:

It has been our custom to charge our factory with the difference between the selling price and the amount received for earned mileage on an adjusted tire. As some auditors think that the factory should only be charged with the difference between the manufacturing cost of the tire and the amount received for earned mileage, we would like to have you give us the benefit of your experience in this line.

In making adjustments in the first way we are taking into consideration that the sales department is entitled to credit for mileage which is actually earned.

Thanking you for your attention to this, we are

Very truly yours,

J. W. D.

The whole question as to the amount which should be charged to the factory on account of the return of a tire under the guarantee turns on whether or not it is considered that the general office should realize two profits because it has sold two tires. By your plan this question is answered in the affirmative. This would be entirely equitable if it were not for the fact that the general office does not incur any selling expense

in disposing of the second tire. It would seem as if it would be more just to adopt a course which would take this fact into consideration by allowing the factory an amount representing the selling expense.

It might be pertinent to ask the auditors who claim that the factory should be charged only with the difference between manufacturing cost and earned mileage what entry they would make in case the earned mileage exceeded the cost.

Opening Partnership Books

Editor, Students' Department:

I would appreciate your advice with respect to the opening entries for a newly formed partnership, succeeding an old firm under the following conditions:

The Right & Left Co. dissolved, Mr. Right taking the following assets:

Office furniture valued at	$1,000.00	paid Mr. Left	$500.00
Bank balances,	100.00	paid Mr. Left	50.00
Bond investments,	2,000.00	paid Mr. Left	1,000.00

and took these over.

Stock, 50,000 shares, not carried on the books—all taken over by Mr. Right.

Cash, $1,000, received by Mr. Right for sundry assets and accounts—taken by Mr. Left, in excess of those taken by Mr. Right.

The firm of Right & Co. being formed, starting business with the above assets, I presume the opening entry would be as follows:

Debits

Furniture and fixtures,	$1,000.00 (full value)
Cash in bank	1,050.00
Bond investments	2,000.00

Stock investments (value to be determined)

Credits

Capital account Right & Co. aggregate amount of the foregoing debits.

I would appreciate your criticism and suggestions on the above matter.

Very truly yours,

E. G.

Your entries opening the books of Right & Company are in the main correct, if Mr. Right paid Mr. Left $50.00 for half the bank account out of the bank account itself. All the rest of the money he paid seems to have come from some other funds belonging to Mr. Right.

One criticism I must make relative to the capital account. In a partnership there is no single account with capital. Each partner must have a separate, individual capital account. This is true even in this case, where the company is evidently nominal. The account should be "J. B. Right, capital." Since there are no outside liabilities, the balance of the account would, of course, be equal to the total of the assets.

Book Reviews

BULLETIN NO. 10, HARVARD BUREAU OF BUSINESS RESEARCH.

The establishment of business courses at several universities has led to the discovery that business, one of the oldest and widest occupations of man, has evaded scientific scrutiny. The business knowledge of today consists of a scattered flock of customs, maxims and unwritten rules, which the new adventurer into trade must seek and collect under fire; the merciless allied fire of intrenched competition and hostile natural forces. Small wonder that the infantile death-rate of business enterprises is so appalling and the brief life-expectancy of older ones so discouraging.

The progress of science has been discouragingly slow. The old Baconian method, which we had thought obsolete, of collecting innumerable unimportant facts before venturing to form an hypothesis, seems to be the only instrument chosen by the Harvard Bureau of Business Research, whose *Bulletin No. 10* is now before us. With the hope that I can suggest other instruments more efficient and powerful, I have ventured to review the work.

"This bulletin," to quote the opening sentence, "gives the results of an inquiry into the buying, selling and stock-handling methods and operating expenses of representative shoe stores throughout the United States during the last six years."

The bulletin classifies shoe stores in three groups: (1) low price shoes, (2) medium price shoes, and (3) high price shoes. This scheme of classification is of vast importance to future research into business, for I believe it is the first recorded attempt to separate businesses into economic strata. As the bureau proceeds with its collection and study of wider data it will discover that such grouping is common not only to shoe stores, but to every kind of business, and can be more comprehensively expressed by the general terms, necessities, indulgences, extravagances. In combination with this basic classification, sub-classifications will produce important fruitage; for example, consumer, retailer, wholesaler, producer; one commodity, few commodities, many commodities; capital investment, $1,000; $10,000; $100,000. Such research as is the aim of the bureau will entail formal division into determinate classes.

Quoting again, "The methods of the most successful stores in each group have been compared with the methods of the least successful stores in the same group." The methods referred to are confined in this bulletin almost entirely to expenses; in fact it is explicitly acknowledged that "for the purposes of this comparison the stores with relatively low operating expense are regarded as the most successful in each group." It is not too much to say that the adoption of this rule has vitiated the scientific and much of the practical value of the work. It is like calculating the efficiency of a war measure by its cost. Surely the percentage of net profit to capital invested would have been the sensible as well as the recognized test of success. The adoption of this rule has led the investigators into paths quite remote from the avowed destination; those paths have been penetrated through all their ramifications to the very end, and are at best no more than blind alleys.

Even from the utilitarian point of view, which, by the way, is given entirely too much weight at this stage of the investigation, the value is doubtful. It cannot profit a merchant who is paying rent equal to 10.75 per cent. of his sales to know that another merchant pays only 1.51 per cent. (page 38). There is nothing that he can do in the matter, and if his business is profitable, as is admitted by its inclusion in the table, he would not exchange locations if he could. And it may be dogmatically stated that there is nothing so abstruse about expense in general or particular as to require such laborious research for its illumination. The most inefficient manager recognizes the part played by expense, and curtails it constantly and in many cases unwisely. We are glad to see that the unsoundness of the conclusions derived from the data presented is admitted by the authors themselves, for qualifying and evasive phrases occur: page (8) "there are of course numerous exceptions to any general conclusion regarding any one practice"; page (23), "whatever method is followed it of course must be sufficiently flexible to permit of occasional exceptions," and on page (15) "the facts seem to indicate clearly that their buying policy is at least partially at fault."

The most disappointing thing about these bulletins is their concentration upon and solicitous devotion to expense, coupled with their reluctance to dwell upon the vastly more important gross profit. While, in expense items, fractional parts of one per cent. are calculated and expounded, the fact that the rate of gross profit varies from 18.3 per cent. to 40.4 per cent. attracts the most superficial notice. A difference in profit of 22c. on the dollar is surely of more importance than that of a fractional part of 1c., and when that difference occurs in businesses which deal in identical commodities, and are subject to similar price boundaries, it would seem that plain curiosity would demand a solution. This topic appears to me of such paramount importance that I venture to dwell upon it at some length by offering a few facts and comments which may provide, or at least suggest, fruitful methods of attack.

As a necessary preliminary I formulate the following definitions:

Gross profit is the surplusage arising from trading; the excess of proceeds over cost.

The rate of gross profit is the ratio that gross bears to cost or proceeds (purchases or sales), usually the latter, expressed as a percentage.

Other definitions will be formulated in the text. To illustrate these definitions the following example is taken from the report of a shoe business:

Sales		305,139.47
Inventory at beginning	150,276.28	
Purchases	213,332.81	
	363,609.09	
Inventory at close	123,253.21	
Cost of sales		240,355.88
Gross profit		64,783.59

The gross profit is 21.23 per cent. of sales, 26.95 per cent. of cost.

This is the usual way of calculating gross profit and its rate. But it is to be noted that this formula is passive, so to speak. It gives no indication of the forces at work. It is a static formula, and in this shape appears more or less abstruse and incapable of manipulation. But from the same accounts we can derive a dynamic formula, manipulative and docile. Rate of turnover 1.686, multiplied by the cost profit rate 26.95, produces the profit-speed 45.44. Average stock 142,520.46 multiplied by the profit-speed 45.44 per cent. produces the gross profit 64,783.59. My own abbreviation of this formula in practice is,

T 1.686, X PR 26.95 is PS 45.44. X AS 142520.46 is GP 64783.59.

Among other advantages this dynamic formula values turnover accurately, whose profit potentiality is not exaggerated as in the bulletin and so many business publications of today. The rates of turnover and gross profit both may alter without disturbing profit-speed, which in turn is nothing more nor less than the percentage earned on the amount invested—a most, the most significant figure. I speak from repeated experience when I assert that any one of the three factors or elements of gross profit, which I have shown to be the rate of turnover, the rate of profit and the average stock, are subject and amenable to management directive, and that it is not an extraordinary experience for a concern to double its profit earning capacity by thus isolating them and concentrating attention (driving) upon that particular one which at the moment is most pliable. Business in general today is accumulating stock because of the constantly rising market; that is, it is sacrificing turnover to gross profit. Turpentine operators are holding their stocks in anticipation of a rise; sacrificing turnover to gross profit. There is nothing that at this moment is more despised than turnover. Why, then, should this bulletin and other publications persist in giving such bad advice to the business world?

The bulletin's method of calculating average stock must be criticised. It uses simply the average of the beginning and closing inventories. With those inventories available, the rate of profit for the year can be computed, and the application of that rate to a table of monthly purchases and sales would supply the value of the inventory at the close of each month, so that thirteen items would be available instead of two. The accumulation of poor stock and its elimination by clearance sales at certain seasons must have considerable influence upon the fluctuating capital requirements from month to month. The use of but two inventories produces nothing but an amount of doubtful comparative value and is quite useless as a financial guide or budget for the individual shoe store.

For the sake of its dialectic value I present here a table of percentages which I compiled from the 1905 United States report of manufactures. It serves several purposes, but is especially valuable in this discussion for its illumination of the reciprocal relations between the gross profit and expense rates and of the tendency of net profit to equalize in the various industries.

MANUFACTURES OF THE UNITED STATES. (1905.)

	Cost of materials used	Labor	Gross profits	Salaries	Misc. expenses	Net profit
Food and kindred products	80.98	5.76	13.26	1.79	4.64	6.83
Textiles	58.03	19.56	22.41	3.21	9.27	9.93
Iron and steel and their products	54.20	22.14	23.66	4.59	7.67	11.40
Lumber and its re-manufactures	42.40	27.45	30.15	4.00	10.70	15.45
Leather and its finished products	66.71	16.57	16.72	2.55	5.81	8.36
Paper and printing	35.93	21.70	42.37	9.45	16.10	16.82
Liquors and beverages	27.94	8.98	63.08	4.19	44.51	14.38
Chemicals and allied products	59.01	9.11	31.88	4.84	12.50	14.54
Clay, glass and stone products	31.45	37.85	30.70	5.62	9.72	15.36
Metals and metal products other than iron and steel	69.85	12.80	17.35	2.71	4.55	10.09
Tobacco	38.07	19.03	42.90	2.72	24.17	16.01
Vehicles for land transportation	51.87	34.47	13.66	3.73	4.50	5.43
Shipbuilding	44.57	34.94	20.49	3.60	6.02	10.87
Miscellaneous industries	48.88	19.98	31.14	5.42	10.73	14.99
Total manufactures	57.46	17.65	36.84	3.89	9.83	11.17

These considerations give the rate of gross profit a high importance in the conduct of any business and indicate the means of control. Again, an inexplicable fall in the rate is an excellent symptom of disease. When one shoe store can earn 40 per cent. and another 18 per cent., the latter is assuredly suffering from some cause which has nothing to do with expense and it is quite possible to diagnose the disease accurately. Here is a list of some of the factors influencing the rate:

Circumstances indicated by the rate of gross profit alone:

Fall of rate—

Steadily falling market,
Goods paid for but not received,
Goods stolen from store, broken or wasted,
Goods sold and not charged, overdeliveries,
Erroneous price marks,
Bargain and clearance sales,
Inventory deflation in quantity or price.

Besides the opposites of the foregoing, a rise in the rate may indicate, or follow:

Rise of rate—

Pushing of the more profitable lines;
Temporary advantage of supply monopoly.

It is clear that by a process of elimination the field of search for the cause of a fall or rise may be considerably narrowed. The state of the market is common knowledge; the efficiency of the purchase records and of the sales recording methods can be ascertained, and frequent inspection of stock for broken and damaged packages will reveal the likelihood of loss from this source. Pushing of the more profitable lines is a common result of improved accounting methods, in which stocks are departmentalized or separated into classes.

Combinations of the rate of gross profit with other statistics are often valuable. For instance, an abnormally high rate of gross profit, when accompanied by an increase of customers' indebtedness, may signal danger; for some houses sell on credit to customers who could buy nowhere else except for cash, offsetting the extra risk by the higher profit. A rise of the rate of gross profit accompanied by a decrease in the volume of sales is clear evidence that the house in which it occurs is raising its prices too fast and thereby losing customers.

The study of various stocks of goods is necessary in any comprehensive scheme of business research. The examination of various kinds of business will disclose that stocks are usually homogeneous, but are often heterogeneous for quite obvious reasons. Among other things, the ability to foretell whether addition of new varieties of stock will be advantageous or the reverse to any business should not rest upon mere guessing, but upon scientific principles as certain as the grafting of trees or the transfusion of blood. Scientific principles are at work in business, but they are not recognized as such, nor are they under obligation to scientists. They have been forced in by necessity. For instance, alternating adaptation, which is familiar in biology, is just as active in a business which sells ice in summer and coal in winter, so that its delivery equipment is utilized during the whole year; in day and night rates of the telegraph office; and in felt and straw hats.

Finally, the supreme test of business efficiency will for some time rest upon the percentage of net profit to the capital invested. The capital investment, therefore, must be examined in all of its forms, stock of goods, cash, customers, plant, investments and equipment, and principles must be established to govern the proportionate investment in each, so that an efficient technique may be formulated.

FRANCIS M. WILLIAMS.

HOW TO ANALYZE INDUSTRIAL SECURITIES, by CLINTON COLLVER. *Moody's Investors Service,* New York.

This book resembles in appearance so much Moody's *How to Analyze Railway Reports* that one has to think twice in using the two books. There is no attempt to conceal the similarity either outside or in. The author, in the preface, admits planning "to treat industrials as John Moody's *How to Analyze Railroad Reports* does the steam transportation lines." The attempt has, in many respects, been successful. The book is written in a very interesting style. It is teeming with practical illustrations. It is to be especially commended for the general brevity

of the chapters. The subject, following the introductory chapters which deal with generalities concerning industrials, is discussed under four heads—business factors, management, balance-sheet debits and balance-sheet credits. Since it does not purport to be a book on accounting, the occasional faulty nomenclature, such for example as "balance-sheet debits," presumably may not be criticised. If there are any chapters in the book which excel over others they are the ones on management dealing with "The personal equation," "Coöperation and loyalty," "Financial control" and "Financial policy." The chapters on the balance-sheet captions and income accounts appear to be more of a compilation of material than otherwise.

"Certificates of public accountants" receive attention in chapter XVI. In the words of the author, "Too much reliance has been placed upon the indorsement of public accountants of income accounts and balance-sheets. Of course an uncertified financial report is like an unsearched real estate title. But as there are various grades of skill and reliability in the field of title-searching, just so are there various grades of skill and responsibility in public accounting work. . . . The first step to be taken by the prospective investor or speculator is to find that the records are certified by a firm of public accountants, the second is to ascertain the reputation of the public accountants, the third to examine the nature of the certificate. . . . To be dependable an accountant's report must accept full responsibility for all books of record, including all subsidiary books and all sources of entries made thereon as well as the valuation of all property listed. If this is found over the signature of a firm of public accountants having a proper reputation the books of account may be accepted with assurance. It must be remembered that accountants take upon themselves no responsibility for which they do not show obligation in their certificate."

The book would, in the opinion of the reviewer, have been improved if there had been set forth somewhere the qualities by which securities are judged, such as safety of principal, income yield, probable continuation of income, marketability and value as collateral. These qualities stated as tests for securities, together with illustrations in the form of balance-sheets and income statements giving figures to show how the statements are used to test for certain of these qualities would help greatly the average person who is the recipient of investment literature. A sample circular with analysis would not have been amiss. The work of a reviewer is always easier than that of the builder of a book. Reviews are characteristically critical. There is nothing in particular about this book to criticise. The literature of the financial field is fuller and better by reason of its existence.

J. H. W.

SOCIAL DEMOCRACY EXPLAINED, by JOHN SPARGO. *Harper & Brothers,* New York. $1.50.

Mr. Spargo's latest book, *Social Democracy Explained,* differs from the great majority in that the preface is in some ways the most interesting part. At the present moment we are not so much concerned with an

explanation of social democracy as we are with the attitude of those who profess its principles.

The average American has a remarkably hazy idea of every subject directly or indirectly connected with the theory of socialism. As a rule we confuse all isms of a sociological character and are indifferent as to the merits and peculiarities which the followers of each ism claim for their particular theory. We are, however, deeply concerned with the attitude of mind and the manner of those who, professing to see the dawn of a new era in any of the many more or less idealistic cults, are liable to allow theory to crowd out loyalty.

Everyone knows that the socialists of Germany, in spite of their possession of the balance of power in the deliberative assemblies of the German empire, have failed dismally since militarism uttered its war cry. For a time we doubted the faith and loyalty of the entire socialist party of this country. Latterly, however, we have been reassured. There are, of course, many wild and crazy followers of every cult, who prefer to set their notions above the good sense of the community, and there are others who are frankly, or at any rate indubitably, disloyal. But the great majority of thinking men among the socialists have lately found it desirable to express themselves candidly for the prosecution of the war, and we are glad to know that Mr. Spargo is of this number.

The author expresses the intention to publish a volume concerning the new phases of American social democracy. We shall look forward to this coming book as of more importance than the expression of opinions which were made prior to the outbreak of the European war and have been unamended in the book before us. A. P. R.

Albra W. Sharp

We regret to announce the death of Albra W. Sharp, C.P.A., member of the American Institute of Accountants. Mr. Sharp died on May 14, 1918. He had been for eleven years a member of the staff of Lybrand, Ross Bros. & Montgomery and a partner from the first of January this year.

Los Angeles Chapter, California Society of C.P.A.

At the annual meeting of the Los Angeles chapter of the California State Society of Certified Public Accountants the following officers and directors were elected: F. F. Hahn, president; W. C. Mushet, vice-president; E. H. Spencer, secretary-treasurer; H. Ivor Thomas and A. M. Loomis, directors.

Correction

By an unfortunate error two of the forms appearing in the article entitled *Accounting for Liberty Loan Subscriptions*, by Arthur F. Jones, in the June, 1918, issue were transposed. The form which appeared on page 426 should have appeared on 431 and that on 431 should have appeared on 426.

Leslie, Banks & Company announce that George K. Hyslop has become a partner of the firm.

Charles H. Pittluck announces the removal of his office to 200 Fifth avenue, New York.

Louis Kadison announces the removal of his offices to 160 Broadway, New York.

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Depletion of Copper Mines in Relation to Income Tax Returns*

By William B. Gower

Those who follow with interest the published annual reports of our large copper mining corporations and have scanned the income returns for the year 1917, which certain of them have given to the press and to their shareholders, must have been surprised at the magnitude of the deduction made therein for depletion applying to the exhaustion of natural deposits.

One large corporation, with an income of $9,871,000 remaining after liberal provision for taxes, shows a deduction therefrom of $4,791,000 for depletion of the mine. Another with a similar income of $22,457,000, shows a deduction therefrom of $5,516,000 for depletion. A third illustration is that of an Arizona mining corporation deducting $1,747,000 from an income of $4,950,000 after taxes. It might be too much to say that deductions from income for depletion, to the extent indicated, are representative and typical in the copper mining industry; it is sufficient to say that they are indicative.

It is but a short time ago that deductions from income for depletion of mineral deposits were of rare occurrence in the accounts of the copper mining industry. In exceptional instances the ore extinguishment charges found periodic recognition in the accounts; but the industry as a whole was indifferent or was opposed to the idea, owing to the uncertainties which surrounded the subject and the resulting complications in the accounts, in the presentment of earnings statements and in the apportionment of

*A thesis presented at the May, 1918, examinations of the American Institute of Accountants.

dividend payments between surplus earnings and reserves for depletion. Prior to 1909 there appeared to be no compensating material advantages, no monetary gain, in making this concession to strict accounting theory.

The various federal tax laws based on net income of corporations have changed all this. The first stirring of the waters came with the passage of the 1909 tax law. The movement was accelerated by the specific mention in the 1913 tax law of a deduction from gross income, for depletion of mineral deposits, in order to arrive at net income. It gathered momentum with the adoption of the 1916 tax law, and the promulgation by the treasury department of specific regulations on the subject. The early opposition of the treasury department to the idea of depletion as a deduction has not only disappeared, but, in consequence of the invested capital feature of the war excess profits tax law of 1917, the department now requires a declaration from mine owners to the effect that exhaustion of mineral deposits has been provided for adequately. The indifference of the copper mining industry has disappeared completely and has been replaced by active interest in the subject. From a negligible sum, the deductions made by the mining industry in its income tax returns for depletion of ore bodies have increased in recent years to hundreds of millions of dollars. The history of this complete reversal is both interesting and instructive.

Years ago accountants recognized that the gradual exhaustion of the mineral deposits inherent in the business of mining was an element of expense which had its place in the subordinate accounts of proprietorship which Professor Sprague has termed the economic accounts. They reasoned that in the process of mining there was a parting with assets in the expectation of recovering ultimately assets of greater value, just as there is in permanent and continuous manufacturing ventures; and that the same rules which govern the accounting in the latter must necessarily apply to the former. In the economic accounts of permanent and continuous manufacturing concerns the decreases of wealth are offsets to the increases, but for analytic purposes they are recorded separately—on the one side, profits, gains, revenue, income earnings; on the other side, losses, expenses, charges, outlays—the former, increases of wealth for services given; the latter, decreases of wealth for services received.

In recognizing depletion of the ore body as an element of expense, a parting with assets in the expectation of recovering assets of greater value, accountants were on unassailable ground. In their application of the theory, however, they were less fortunate. The principles which the profession in general accepted were stated clearly by A. Lowes Dickinson in 1904, and reiterated later by him in his work *Accounting Practice and Procedure* (edition 1914, page 172).

The product taken out of the land becomes stock in trade as soon as it is extracted, and whatever the land was worth before its extraction, it is clearly worth an appreciable amount less thereafter. The provision to be made should be on the basis of the quantity extracted, having regard to the total available, and to the realizable value of the property after the products have all been extracted. The same principle would also apply to timber lands where no provision is made for reforesting. The contention is sometimes raised that no provision need be made for exhaustion of subsoil products where the amount known to be in a definite tract at the end of any period is largely in excess of that which had been discovered at the beginning of the period. This argument can not, however, be admitted except as a reason for reducing the rate to be provided. As a general principle, whatever there was in the ground, whether known or unknown, has been reduced during the period under consideration by whatever amount has been extracted; and while the new discoveries may be accepted as reducing the necessary rate of provision for extinction from, say, one dollar to one cent per unit of quantity, the original principle that provision must be made holds good on the smaller figure, whatever it is. It may be, of course, that the provisions made in earlier years have been sufficient to cover a number of future years on the basis, from the commencement, of the rate subsequently found to be sufficient in view of the new discoveries; and in this case there would be no necessity to provide further for extinction until the total production at the new rate is equal to the total amount written off.

When we examine this authoritative statement of the position so long accepted by accountants in general on the subject of depletion of mineral deposits, we find an embodiment of a theory, and the application of that theory, stated or inspired, substantially as follows:

Theory

(1) That gradual exhaustion of the ore body is an element of expense which may be included in the operating accounts, but does not necessarily appear throughout the period during which the process of exhaustion continues.

(2) That the total expense of this character which may be included in the operating accounts of a mining property is commensurate exactly with the original cost value of the mine (if purchased with cash, capital stock of definite par

value, or with other property of definitely determinable value) or the original appraised value of the mine if purchased with capital stock of no stated par value.

(3) That after this originally stated value has been absorbed as an expense into the operating accounts, there is no more expense of this character, even though valuable minerals continue to be won from the same property.

Application of Theory

(1) An amortization of the originally stated value of the mining property, corresponding broadly to depreciation of plant, equipment and assets of a similar character.

(2) When it is possible to determine in advance the exact tonnage of mine content, the periodic depletion charge is a fraction of the originally stated value whose numerator is the tonnage of the ore extracted during the period, and whose denominator is the total original tonnage of mine content.

(3) In cases of new discoveries of ore bodies, the periodic depletion charge continues to be a fraction of the originally stated value of the mine, but the denominator of the fraction is changed by adding the tonnage of new discoveries to the originally known tonnage of mine content.

In considering the application of this theory to the copper mining industry it must be borne in mind that new discoveries of ore bodies are the rule, rather than the exception. If the industry as a whole, therefore, had adopted the depletion rules described by Mr. Dickinson, the result would have been (as he himself points out) the registration periodically in the economic accounts, as an element of expense, of charges for ore extracted carrying constantly varying rates per ton for the same or similar material. In a given year, a ton of ore might be charged at one dollar; in the next year, a ton of the same grade of ore might be charged at one cent; in the next year, at any value between the two; in the following years, perhaps a temporary cessation of any charges, with a resumption later on. This anomaly by itself is sufficient to explain the general non-acceptance of the depletion plan by mine owners and executives.

The advent of income tax laws, which recognized by specific mention a deduction from gross income for exhaustion of natural deposits in order to arrive at net income, compelled mine owners, executives and accountants to re-examine the subject. The promulgation by the treasury department of specific accounting rules quickened their activities, more especially as these regulations were inconsistent with the principles formerly accepted. Mine accountants are not yet agreed upon the entire procedure which should be followed, or the new principles which should be adopted, but the tendency is toward the adoption of the following:

THEORY

(1) That gradual exhaustion of the ore body is an element of expense which should be taken up in each and every fiscal period during which minerals continue to be won from the mine, at a more or less constant rate per ton.

(2) That the total expense of this character to be absorbed in the operating accounts is the intrinsic value of the mine content (in place, en bloc) which existed from the beginning, although much of it may have been latent and determined only by "extension in depth."

(3) That by the term "intrinsic value of the mine content" as used above is meant the product of two factors:

(a) The tonnage of mine content as finally ascertained.

(b) A unit price per ton representing the bed-rock value of the average grade of ore, in place, en bloc, including proved ore, probable ore and prospective ore, estimated at the commencement of business. In bed-rock value the price of metals in estimated mine content is calculated at some figure between "basic" and "normal"; cost of production and selling is calculated at maximum probability; the rate of mining and the life of the property must be estimated; from these factors a discounted or present value at true rate of interest is obtained; and this capital-value is then reduced by a substantial deduction due to the element of risk.

APPLICATION OF THEORY

(1) The depletion expense of each and every fiscal period during which mining operations occur is the tonnage of ores extracted multiplied by the more or less constant rate per ton established by original estimate of value in place.

(2) The rate per ton of ore extracted, for purposes of the depletion expense computation, would change only in the event of subsequent discovery of relatively large bodies of ore of a grade differing widely from the original estimates.

(3) In the case of "extension in depth" developing new values it may be necessary from time to time to adjust the book value of the mining property, in order to harmonize with intrinsic value.

It is important to note that these principles imply the necessity of occasional adjustment of the book value of the mining property in order to harmonize with proven intrinsic value, as above defined. The excess value arising from "extension in depth" is in its nature capital surplus—a part of the original contribution of the proprietors—and it would be entered in the accounts of proprietorship accordingly. The fact that in the administration of the present income tax law any excess value of this character over that established as of March 1, 1913, will be considered as an income surplus, and not as a capital surplus, does not change the underlying principle in any way. It may be income surplus for purposes of tax legislation, and mine owners may have to return it as such; but in accounting theory it is capital surplus, and should be so recorded in the accounts.

It is interesting to trace the stages through which we have passed in development of the theory and application of depletion of mineral deposits and its influence upon income tax legislation.

The corporation excise act of 1909 required the net income of corporations to be determined by deducting from the gross income, inter alia, "all losses actually sustained within the year," including "a reasonable allowance for depreciation of property, if any," etc.

The mining industry, in general, did not believe that this provision in the statute was sufficiently specific or broad to include within it an allowance for ore extinguishment, and few corpora-

tions considered it worth while to make a deduction of this character in their returns of net income. There were exceptions, however, and the issue was quickly joined by the Nipissing Mines Company, which deducted from the gross income the value in place of the ore removed during the taxable year, at the rate of 31.1 cents per ton. The deduction was disallowed by the treasury department, and the case was tried in the United States district court, southern district of New York. The view of the corporation prevailed, mainly as a result of the opinion expressed by Justice Lacombe in his charge to the jury. Unfortunately, limits of space do not permit us to quote his opinions in full, but the final paragraph states the general position with such force, and had such an effect upon subsequent legislation, that it is well to repeat it here:

> If the known value of an ore bed were exactly $2,000,000 and exactly $500,000 were taken out of it each year, in four years there would be nothing left. It is difficult to say why it may not reasonably be said that the ore bed suffers each year a depreciation of $500,000, just as a $10,000 piece of machinery with a life of ten years, suffers a depreciation of $1,000 each year. As I read the statute congress intended to allow all reasonable depreciations to be deducted from the gross profits to find the net; and the reasonableness of any deduction asked for depends upon the nature of the claim on which it is based, not upon the amount of dollars it may aggregate. Nor is it apparent why it should make any difference that one cannot tell with reasonable certainty the total value of the deposit so long as the value of the amount removed in any one year can be ascertained with sufficient accuracy. Nor is it apparent why the problem is altered in any way by the circumstance that the property was bought at a very high or at a very low price, or that the capitalization of the company which owns it is large or small.

It is to be observed that in this judicial opinion the basis of amortization is the whole intrinsic value of the mine content, salable in place, which existed from the beginning, and not merely the original cost or recorded book value or what might be termed the originally stated value. As a result of Justice Lacombe's opinion, the treasury department promulgated T. D. 1742 on December 15, 1911, a long and somewhat complicated pronouncement, which recognized depletion of mines as a deduction in arriving at net income, but regarded it as an amortization of intrinsic value existing at January 1, 1909, in the case of properties acquired before that date. Its application of the theory, however, was unsound and almost incomprehensible; but this was of little consequence, as it was never acted upon and was quickly consigned to oblivion.

Meanwhile, another case was pending in the United States courts involving a still wider application of the theory of depletion of mines. This was the case of Stratton's Independence, Limited, and it raised the question that mining companies were exempt entirely from liability to tax under the act of 1909. The main contentions were (a) that the proceeds of ores mined by a corporation from its own premises were not income, but a mere conversion of its capital assets from one form into another; and (b) assuming that the proceeds from ore sales should be treated as income, such proceeds in their entirety result solely from depletion of capital, and were deductible as depreciation.

The supreme court regarded such an extension of the theory of depletion as inadmissible, and the argument in favor of it as sophistical; but the closely reasoned opinion of the court indicated clearly its belief that some allowance, a reasonable allowance, was intended to be made in the tax law of 1909 for depletion of mineral deposits.

The decision of the supreme court in the Stratton's Independence case appeared very shortly after the passage of the income tax law of 1913, in which there appeared for the first time a specific mention of depletion of natural deposits as a factor in determining net income. Under this law a deduction from gross income might be made, as follows:

> In the case of mines a reasonable allowance for depletion of ores and all other natural deposits, not to exceed 5 per cent. of the gross value at the mine of the output for the year for which the computation is made.

The pressure of the mining industry and the force of the Lacombe opinion had compelled at least a qualified legislative acceptance of the idea that the gradual exhaustion of the ore body was an element of expense in determining net income. That it was coupled with a restriction, which in most cases vitiated correct application of the theory, was a matter of secondary importance. The restrictive clause was a palpable makeshift, with not a shred of reason to support it. In most cases its effect was to strike out the all-important adjective "reasonable" as applied to the depletion allowance; in other cases to restrict the allowance to less than the actual cash purchase price of the tonnage.

The 1913 tax law was silent on the fundamental question as to whether the total expense for depletion of mineral deposits was commensurate with

(a) the value of the mine as reflected by the original capital investment;

or

(b) the appraised value of the mine content at a date set by legislative enactment;

or

(c) the intrinsic value of the mine content which existed from the beginning, whether then known or latent.

The treasury department, however, undertook to construe the law by regulations No. 33 of January 5, 1914, and in article 142 declared that aggregate deductions for depletion of mines must not exceed the original capital investment.

The discussions which arose out of the confusion created by the makeshift treatment of depletion of mineral deposits in the tax law of 1913 resulted in substantial progress towards a better understanding of the principles involved. This was reflected in the present income tax law, enacted in 1916, where a large step in advance was made through the adoption of the following formula:

> In the case of mines a reasonable allowance for depletion thereof not to exceed the market value in the mine of the product thereof which has been mined and sold during the year for which the return and computation are made, *provided* that when the allowance authorized shall equal the capital originally invested, or in case of purchase made prior to March 1, 1913, the fair market value as of that date, no further allowance shall be made.

The depletion clauses of the tax law of 1916 have been construed by the treasury department at considerable length in T. D. 2446 of February 7, 1917. The essentials in the case of mines acquired before March 1, 1913, are as follows:

Total amount of depletion expense
which may be absorbed in operating costs

The fair market value of the mining property as of March 1 1913, meaning thereby the price at which the mineral property

as an entirety in its then condition could have been disposed of for cash or its equivalent.

Annual rate of extinguishment

A constant value per ton (or unit) applied to the tonnage of ore mined and sold during the year.

Ascertainment of constant unit rate

The fair market value of the mining property as of March 1, 1913, divided by the number of units (tons, pounds, etc.) in the mine, estimated if not ascertainable exactly.

We who hold to the view that a fair value for the ore extracted from a mine must at all times constitute an expense item in the economic accounts, and that the aggregate expense of this character is the intrinsic value of the mine content which it possessed from the beginning, without regard to arbitrary capital investment figures or conjectural values made at the time of acquirement of the property, are not shaken in our position by anything in the tax law of 1916. We do not even regard the position as inconsistent with the law, and we would continue to include depletion expense among the deductions, if proper, even after the absorption of the prescribed maximum; but we would be obliged, under the law, to return as gross income any excess over the aggregate depletion deductions permitted by the statute. Consequently we regard the question raised by the restrictive clause in the depletion paragraph as one which involves the right to require us to return as income the increment over originally appraised or stated value determined by the expansion of the ore reserves through "extension in depth"—a phase of the economic question as to the distinction between capital and income.

The final question relates to the method to be pursued by the treasury department in applying the present income tax law, so far as depletion of mineral deposits is concerned. The statute opens up the insuperable difficulties which underlie the problem of mine valuation, for as Mr. Hoover says in his standard work, "it is utterly impossible to accurately value any mine, owing to the many speculative factors involved." He points out that the value of in situ deposits of copper, etc., depends upon

(a) The profit that may be won from ore exposed;

(b) The prospective profit to be derived from extension of the ore beyond exposures;

(c) The effect of a higher or lower price of metals;

(d) The efficiency of the management during realization;

and that the factors which arise on the valuation of mines involve a wide range of subjects, all containing more or less speculative features, which factors he enumerates as consisting of

(1) Determination of average metal contents of the ore.
(2) Determination of quantities of ore.
(3) Prospective value ("extension in depth").
(4) Recoverable percentage of gross value.
(5) Price of metals.
(6) Cost of production.
(7) Redemption or amortization of capital and interest.

According to the treasury regulations the value of the mining property "must be determined upon the basis of the salable value en bloc, as of that date, of the entire deposit of minerals contained in the property owned, exclusive of the improvements and development work." This is a mere general direction, wholly lacking in specific features; but it is supplemented by certain negative directions, saying how the mine value must not be determined. The value must not be based upon assumed salable value of the output under current operative conditions, less cost of production. It must not be a speculative value.

Unfortunately the negative directions contained in the regulations prohibit the adoption of usually accepted practice in mine valuation, while the positive directions do not supply a working alternative. The matter is discussed at considerable length in a report made by a committee of the American Institute of Mining Engineers, but the conclusion reached, herewith quoted, seems rather to leave the whole question where it was—

> Therefore, an amount, less than the earning value of the mine, representing, as far as possible, a consideration of all underlying factors and involving, in no small measure, the personal equation of the appraiser, at which amount the appraiser could and would conscientiously advise a client to become the purchaser of the property, is the amount of invested capital which under the regulations represents the en bloc value which may be written off as depletion by making a proper distribution thereof against units of production.

It is possible that the internal revenue bureau will adopt this recommendation and order impartial expert appraisal of each mining property, to be followed by an examination by experts on behalf of the department covering the data and method employed in each case and an adjustment of debatable factors therein. This would be a slow process, however, and scarcely meet the need of quick action in passing upon very large deductions for depletion in the income tax returns. For immediate purposes, and as a temporary measure, the department will probably prefer to concentrate its attention upon the unit value (per ton, pound, etc.) used in the computation of each depletion deduction; making comparison with similar unit values adopted throughout the industry; taking into consideration the special circumstances of each case, the grade of ore mined and sold, the cost of production and other outstanding features, and satisfying itself that bed-rock value has been used.

Liberty Loan Accounting for Small Banks

By Willard H. Lawton

The system of accounting for Liberty loans hereinafter described is one adopted by the writer for a small trust company in a suburban town. By accountants there is nothing novel to be found in it, and it is published merely with the hope that it may save some time and labor in future Liberty loan accounting to that busiest and least appreciated of financial mortals—the treasurer or cashier of a small-town bank.

As a rule banks of this class conduct their books on a strictly cash basis. Except for an end-of-period accrual of interest on investments and long-time loans, accruing is practically ignored as a factor of expense or liability. It is quite natural, therefore, that such a bank should treat Liberty loans also on a cash basis. The usual course is to open a single account for the particular Liberty loan and credit it with cash coming in from subscribers and debit it with cash paid to the government on account of bonds, the theory being that, when all the subscriptions have been paid and the bonds subscribed for bought, the account will balance and be closed. In theory this is true, but it is obvious that in the interim the account contains little information of any particular value. Its balance at any given date merely shows the difference between cash received and cash paid out, which in the earlier stages shows an apparent liability on the balance-sheet and in the later an apparent asset, neither being in accordance with the facts. The bank is at no time liable to the subscriber for the amount of cash he has paid—if he has paid in full, it owes him a bond, and if he has paid only on account, he owes the bank the balance still due on the bond he has subscribed for. Similarly, when later the balance falls on the asset side of the sheet, the assumption that the bank has an asset of that amount is unwarranted, for any cash in such balance belongs to the government and must be paid in due course, while any bonds included in the balance do not belong to the bank at all, and will not become its property unless the original subscriber defaults on his payments and the bank refunds to him any amount already paid. Again, the account furnishes no information as to the total

subscribed, the amounts still to be received, the amount of bonds on hand or yet to be delivered, nor the amounts still to be paid to the government on instalments. All such information must be sought from other memoranda, and the facts themselves are too important to be left to such haphazard methods.

Another error, of major or minor importance according to the financial strength of the bank, is apt to creep in when making up statutory public statements. If the balance of this account is on the credit side of the sheet, it means, of course, that the bank has received so much more cash from the subscribers than it has paid to the government. That cash is not segregated, but merged with the general cash on hand. If the credit item is reported as a liability in full, no harm is done, although, as we have seen, the statement is not correct, but there is a strong temptation always present for a weak bank to treat the item as a deposit, and in that case only 7½% or at most 15% of the amount would figure as a reserve. Of course, if the Liberty loan account is kept in this way, then any such cash should be omitted from its statement entirely together with the hypothetical liability.

The system adopted by the writer, serving as temporary treasurer of a small trust company while the actual treasurer was on government service in France, is as follows:

Three accounts were opened on the general ledger, viz.:

A Subscribers to 3rd Liberty loan,
B Third Liberty loan bonds subscribed,
C Third Liberty loan bonds purchased.

When the subscriptions began to come in, the total amount of each day was debited to account A, which, of course, was a controlling account, and concurrently credited to account B by the journal entry,

Subscribers to 3rd Liberty loan	\$....	
To 3rd Liberty loan bonds subscribed		\$....

Accounts of individual subscribers were kept on stock ledger-cards, 3 x 4, and at the close of each day the total debit of the ledger-cards was agreed with running list of subscriptions and also with the daily report sent to the federal reserve bank of the district, said total being debited and credited as above, of course.

Payments received in full or on account were credited during the day to the individual card accounts, the cards being taken from the box and laid aside until the close of the day, when they were totalled and the total credited to account A. During the rush when it was simply impossible to credit the individual cards fast enough, the receiving teller kept a running list of such receipts from which postings were made later. Though it was not necessary later, the same system was kept up as a check on errors and has proved satisfactory.

When the first instalment was paid to the government it was charged to account C, third Liberty bonds purchased. Many bonds were paid for in full with the subscription, so it was necessary to pay in full for a large number of the bonds, the amount being entered separately in the account, thus:

Third Liberty loan bonds purchased

May 9.	5% on $100,000		5,000
	# — #	50s	
	# — #	100s	20,000
	# — #	500s	

the space for the serial numbers of the bonds being left blank until the bonds were received, when said numbers were filled in.

When the bonds were delivered to the subscribers, the serial number and amount were entered in red ink on the ledger-card in the form of a brief receipt, thus:

Rec'd bond #.... for $.... (date)

and the subscriber was required to sign the card itself. This eliminated the trouble and waste of having a file of separate receipts. Where bonds were mailed on request, a notation was made on the card, and the receipt when it came back was attached to the original subscription blank and filed.

These cards were also laid aside on the treasurer's desk until the close of the day, when a summary of them was made up and the total entered via a journal entry—

Third L. L. bonds subscribed	$....	
To third L. L. bonds purchased		$....

in the general ledger accounts, the total only appearing in the first account, and the second being detailed, as

Third Liberty loan bonds purchased			
June 17	#6118,073—082	1000.	
	3313,120—125	500.	
	etc.		

After checking both by balance and by the next serial number of each denomination the correctness of the record of each day's bond deliveries, the individual cards were filed in a "paid and delivered" section of the card box as a permanent record for future reference.

On the weekly payment plan the bank uses the punch-card duplication system in collecting payments. The individual ledger-card is then stamped with the serial number of the punch-card, and payments to date are posted from the latter to the former at such intervals as may be convenient. The total daily receipts from the punch-cards are posted into the general ledger account, "subscribers to third Liberty loan," as a separate item from payments received via the regular ledger cards, thus:

Subscribers to third Liberty loan		
June 15	Ledger cards	$145.
	Cards	249.—
17	Ledgers	475.—
	Cards	131.—

Naturally this means that the total balances of the individual ledger cards will not agree with the balance of the controlling account except at times when the punch-card payments have been posted to date. The latter balance, however, can always be verified by taking off on an adding machine the total balances of each class and adding them together.

The handling of inevitable duplicated subscriptions and cancellations, the latter involving often the refund of amounts already paid, is obvious to any bookkeeper, so the writer will not dwell on this feature save to say that as a matter of convenience he does not enter up the cancellations daily as they occur, but keeps the individual cards showing such cancellations segregated for a period and then enters them in total on the

general books. Where such cancellation occurs on an account which is partly paid, as will necessarily be the case when duplications creep in, the amount to be cancelled is transferred to a new card for the purpose of being cancelled later. In this way it is possible to bring together in their respective sections of the card-box, the open, paid but not delivered, paid and delivered, and cancelled accounts, for better convenience in handling.

The group of Liberty loan accounts on the general ledger is now ready to furnish complete information. The balance of account A shows the amount still due from subscribers. The balance of account B shows the amount of bonds at par yet to be delivered. (This balance is both contingent and absolute, for the number of subscribers who pay in full and fail to call for their bonds is always amusingly large). The balance of account C shows the amount of bonds on hand plus, if any, the amount paid on government instalments; the total of the debit side, the amount paid the government to date; the total of the credit side, the amount of bonds delivered to date. The difference between the total debits of account C and the total credits of account B shows the amount yet to be paid to the government. And finally, the difference between the sum of the balances of accounts A and C and the balance of account B will always tell the bank whether it has received more from the subscribers than it has paid the Government, or vice versa.

Corporation Organization and Accounting*

BY WILLIAM H. BELL

CORPORATIONS DEFINED AND CLASSIFIED

A corporation is defined by the *Standard Dictionary* as "an artificial person created by law, consisting of one or more natural persons united in one body under such grants as secure a succession of members without changing the identity of the body, and empowered to act in a certain capacity or to transact business of some designated form or nature like a natural person."

Corporations are classified as aggregate and sole, and the former as public and private. This dissertation will be confined to matters affecting private corporations conducted for profit, and in some respects to such as are termed "business" corporations, in contradistinction to moneyed and public utility corporations.

FORMATION OF CORPORATIONS

In the state of Missouri, all corporations are formed under the general laws; that is, no special charters are granted by the legislature. A corporation organized under the laws of the state of Missouri derives its legal existence and authority from those laws and its certificate of incorporation.

Articles of agreement of the incorporators, showing the name of the corporation, purposes for which incorporated, amount of capital, duration, etc., are recorded in the office of the recorder of deeds of the city or county and a certified copy is filed with the secretary of state, who thereupon issues the certificate of incorporation. A certified copy of this certificate must also be recorded in the office of the recorder of deeds. Any amendment of the "articles" must be similarly recorded and filed. The corporate existence dates from the time of filing of the "articles" with the secretary of state. No certificate of incorporation will be granted before the payment of the organization tax of $50.00 for the first $50,000 or less, and $5.00 for each additional $10,000, or fraction, of authorized capital stock.

Missouri corporations are restricted as to authorized capitalization by a minimum of $2,000 and a maximum of $50,000,000. Of

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the authorized stock issue, 50 per cent. must be subscribed and actually paid to the corporation in cash or in property of equivalent value, which cash or property must be in the custody of the persons named in the articles of agreement as the first board of directors, at the time of filing said articles. All property received in lieu of cash must be fully described in the articles. If the entire authorized capital stock is not subscribed for at organization, the corporation must report to the secretary of state (upon the completion of the sale of each 25 per cent. of the unissued stock) all subsequent issues, showing the consideration received.

Missouri corporations are not granted a life of more than fifty years. The law provides that at the expiration of the time stated in the charter the corporation has a right to retain its name by a renewal of the charter.

Capitalization—Capital Stock

It will be seen that the capitalization of a business corporation is in the form of capital stock, or, as it is sometimes called, share capital. These terms, from the point of view of the corporation, are synonymous with capital in the economic sense, and from the point of view of the investor are synonymous with proprietorship, except that usually the ownership of any one investor is an undivided aliquot part of the business.

While in practice it is usual—compulsory in the state of Missouri—to set a value on each share of stock, known as par value, it will be seen later that such a valuation is nearly always arbitrary and frequently fictitious. With the single exception of the value attaching in the event of dissolution to stock preferred as to principal, the interest of the stockholder in the business is measured by the ratio of the number of shares held by him to the total number outstanding.

When stock has a stated par value it can not usually be disposed of for less than par. This is the law in the state of Missouri. If it should be disposed of at a discount, the holder would be liable to the creditors of the corporation for the amount unpaid. However, that does not prohibit companies from selling stock on the instalment plan, and it sometimes happens that stock is never fully paid up, the part payments furnishing sufficient capital. In these cases the stockholders would, of course, in the event of insolvency and dissolution, be liable pro rata for any deficiency in the assets to liquidate the liabilities.

It will be noted that in Missouri, as in most states, stock may be paid for in property. In most states, also, services rendered are sufficient consideration for the issue of stock. When property or services are accepted in lieu of cash it is incumbent upon the directors to adopt resolutions to the effect that such property or services have a value to the corporation equivalent to the par value of the stock issued therefor.

This latitude given to directors in the valuation of property and services has undoubtedly resulted in many abuses in the form of overcapitalization—"watered stock." Most of the corporations in existence today have acquired the business of an individual or partnership or represent a merger of two or more corporations. In fixing the capitalization of the corporations the organizers have been guided by the prospective earning power rather than the intrinsic value of net tangible assets. For example, if in their judgment the business would earn a net income of $100,000 a year having regard to economies to be effected by the new organization, etc., the corporation would probably be capitalized at $1,000,000, that is, on a 10 per cent. basis. Assuming that the book value of the net tangible assets acquired was $600,000, the directors would declare them to be worth $1,000,000, and the difference, $400,000, would be capitalized as good-will, patents or trademarks, etc. Unquestionably, such a method of determining capitalization is logical but, unfortunately for many investors, it has been abused by promoters overstating or overestimating the prospective earning power of the business and concealing the resultant valuation of intangible assets.

To obviate this latter abuse or fiction a few states, notably New York, Maryland, Delaware and Maine, now permit corporations to issue stock without par value, and the practice is being adopted widely, especially by large corporations. This applies to any stock except preferred stock having a preference as to principal, which, obviously, must have some stated value. According to the New York law, stock without par value may be sold at any price fixed by the certificate of incorporation—by the directors, if power is given them by the certificate of incorporation, or by a two-thirds vote of the stockholders. The certificate of incorporation must state the number of shares to be issued and the amount of the capital with which the corporation will carry on business, which shall be $5.00 or some multiple thereof for each share

authorized. A corporation issuing such stock may not declare a dividend whereby the capital will be reduced below the amount stated in the certificate of incorporation.

Under this method it is not necessary to inflate the property values, and the interest of each stockholder is computed in terms of shares rather than dollars. As the stock may be sold at different prices, obviously the only parity of the shares is in number.

There are two general classes of capital stock, preferred and common, but there are many variations in the privileges attaching to each class, and there may be further grades of preferences, such as first and second, or class "A" and "B," preferred. The preferred may or may not be cumulative, that is, its preference as to payment of dividends may accumulate against the common if the company did not earn, and consequently could not pay, the dividend regularly; the preferred may be entitled to preference as to dividends only or as to assets as well; the preferred may be limited to a certain rate (Missouri corporations are limited to 8 per cent.) or, for example, may share with the common in all earnings over a certain rate on the common.

It is not unusual for preferred stock to be redeemed or to be converted into common. For a Missouri corporation to issue preferred stock after it is organized the consent of all the common stockholders must be obtained.

Reorganizations and adjustments of the finances of some corporations have resulted in sub-classifications of stock such as "assenting" and "non-assenting," indicating that the holder has or has not assented to some action of the majority, such as levying an assessment. These distinctions often have a considerable effect on market values, but do not necessarily require expression in the accounts.

Of any increase in the capital stock of a Missouri corporation over the amount authorized by its charter, one-half must be paid up in lawful money before the increase will be sanctioned by the secretary of state. An increase in common stock or a decrease in any class of stock must be ratified by the holders of a majority of the stock. The capital stock may not be diminished below the amount of the corporation's liabilities.

Corporate Administration

The conduct of corporate business, as distinguished from that of sole proprietorships and partnerships, is governed by, first, the corporate laws of the state in which incorporated; second, its charter (by whatever name called); and, last, by its by-laws, which are adopted by the incorporators. The management is entrusted to a board of directors elected by the stockholders; and this board elects officers who are charged with the direct administration and report to the board. The important actions of the board, as well as of the stockholders, are recorded in minute books. It is not unusual for an executive committee of the directors to meet more frequently than the board and to exercise more intimate control than the directors usually do. Such a committee keeps minutes of its own, which are read to the board at its meetings.

Directors and officers are usually elected for one year, but the tenure of directors is frequently three years, one-third of the board retiring each year. There is much variation in the number of directors. In the state of Missouri there must be not less than three nor more than twenty-one, all of whom must be stockholders and not less than three of whom must be citizens and residents of the state. In some states it is not necessary for a director to be a stockholder.

Recording Organization of Corporation, Etc.

In determining what entries should be made in the accounting records in connection with the organization of a corporation, the best rule to observe, as in all other accounting, is to make the records lucidly express the facts.

Assume the following facts, which should be shown by the minutes:

The St. Louis Manufacturing Company was incorporated May 1, 1918, (the date of the issuance of the certificate of incorporation) with an authorized capital stock of $1,000,000, divided into 5,000 shares of common and 5,000 shares of 7 per cent. cumulative preferred, par value $100.00 each. The entire authorized issue of preferred and 3,000 shares of common are subscribed for, the remaining 2,000 shares of common to be held for future sale if

necessary. The subscriptions and consideration to be given are as follows:

	A	B
Stock subscribed:		
Preferred	$300,000	$200,000
Common	200,000	100,000
Consideration:		
Cash	$100,000	
Net assets of individual businesses, exclusive of cash	400,000	300,000

It is the intention to issue preferred stock for net tangible assets and common stock for goodwill, the business of A being more profitable than that of B. Following are the net tangible assets of the businesses of A and B, as shown by their individual books:

Assets:	A	B	Total
Real estate and equipment	$100,000	$50,000	$150,000
Accounts receivable	50,000	100,000	150,000
Inventories	150,000	100,000	250,000
Total	$300,000	$250,000	$550,000
Liabilities—accounts payable	100,000	50,000	150,000
Net assets	$200,000	$200,000	$400,000

Following are the entries necessary to record the above. They should all be made in the journal, regardless of the fact that entries affecting cash are usually made in the cashbook, and should be dated May 1, 1918, or subsequent:

No. 1

Subscribers to capital stock		$800,000	
To subscriptions to capital stock			$800,000
For the following subscriptions to capital stock, per minutes of stockholders' meeting held this day:			
Preferred:			
A—3,000 shares	$300,000		
B—2,000 shares	200,000	$500,000	

Common:		
A—2,000 shares . .	$200,000	
B—1,000 shares . .	100,000	300,000
Total		$800,000

No. 2

Cash	$100,000	
Sundry net assets acquired from A and B	700,000	
To subscribers to capital stock		$800,000

For cash and other net assets turned over to the company by A and B in settlement for their subscriptions, in accordance with minutes of stock holders' meeting.

No. 3

Subscriptions to capital stock	$800,000	
To preferred capital stock		$500,000
Common capital stock		300,000

For capital stock issued to A and B, their subscriptions having been paid, as above.

No. 4

Real estate and equipment	$150,000	
Accounts receivable	150,000	
Merchandise	250,000	
Goodwill	300,000	
To accounts payable		$150,000
Sundry net assets acquired from A and B		700,000

For distribution of the latter account, in accordance with the minutes of the meeting of the board of directors held this day.

Many accountants advocate the carrying of accounts showing the authorized capital stock. If that were done in this case there would be another entry, preceding No. 3, as follows:

Unissued capital stock—preferred...........	$500,000	
Unissued capital stock—common............	500,000	
To authorized capital stock—preferred...		$500,000
Authorized capital stock—common....		500,000
For authorized issues of preferred and common capital stock.		

The credits in entry No. 3 would be to the "unissued" accounts, leaving a debit balance of $200,000 in the unissued—common—account. In the opinion of the writer, such elaboration of the accounts is unnecessary. The amount of the authorized issue of stock is recorded in the minutes, etc., so that there is no danger of its being forgotten. If the two accounts are carried it is necessary to take both into consideration in ascertaining the amount of stock issued and outstanding, which is the really important fact. If desired, the amounts authorized and unissued may be shown in a financial statement without being carried on the books.

The foregoing suggests the method of recording the organization of a corporation whose capital stock has a par value, under virtually any conditions. If the stock is sold on the instalment plan, entry No. 3 would not be made until the stock is all paid for, as the stock certificates would not be issued until then. The accounts "subscribers to capital stock," representing the account receivable, and "subscriptions to capital stock," representing the capital liability not evidenced by permanent stock certificates, should always have the same balance; or at least the former should never exceed the latter.

When there are many subscriptions payable in instalments it is advisable to keep detail accounts with subscribers in an auxiliary record. It may also be well to create separate general ledger

accounts for the amounts due on each instalment. The entries in this latter case are exemplified as follows:

No. 1

Subscribers to capital stock................	$300,000	
To subscriptions to capital stock........		$300,000
For subscriptions, per detail records, payable in three equal instalments due Jan. 1 and July 1, 1918, and Jan. 1, 1919.		

No. 2

Instalment No. 1, capital stock subscriptions..	$100,000	
To subscribers to capital stock..........		$100,000
For instalment payments on capital stock subscriptions due Jan. 1, 1918.		

No. 3

Cash	$100,000	
To instalment No. 1, etc................		$100,000

This latter entry is only theoretical, as the cash received would be entered in detail in the cashbook.

Instalments Nos. 2 and 3 would be recorded in the same manner. The only advantage in thus setting up each instalment is to render immediately available information regarding delinquencies. It is doubtful whether the additional work is warranted by the slight advantage.

If a subscriber defaults in his payments, usually any amounts he has paid will be forfeited. The subscription may be canceled and the forfeited deposits credited to surplus, or the stock may be advertised for sale and sold to the highest bidder, but for not less than the unpaid instalments, as the stock must be full paid.

It is seldom that the stock of a new "business" corporation is sold at a cash premium, which is the only proper method of creating a surplus at the commencement of business; but it is quite customary for banks to start business with a surplus. In such cases the capital stock account is credited at par value and the premium is credited to surplus or capital surplus account.

In the foregoing, reference has been confined to the accounts of corporations issuing stock with par value. While the treat-

ment of stock without par value is not a vital question in the state of Missouri at this time, it is well to recognize the subject in view of the unquestioned logic in issuing such stock and the consequent tendency of corporations though domociled, for practical purposes, in Missouri to incorporate under the laws of another state.

As to the book entries, which are in all cases merely the expression of transactions and agreements, there is little essential difference, but if the stock has no par value the credit to capital stock account should be the actual cash or the actual cash value of other property received. There is no occasion for the capitalization of goodwill, nor is there any excuse for charging to organization expense commissions on the sale of stock, which are often virtually discounts.

It seems appropriate to state under this heading that for practical purposes it is well to keep a separate account for the surplus where the stock has no par value, the same as where it has.

The book value of the stockholders' equity in the business under both forms of stock issue is represented by the total of the capital stock and surplus accounts. True value, or market value, of any kind of stock is concerned with this and other factors; indeed, market value may be entirely speculative.

(*To be continued*)

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EDITORIAL

Actuarial Science

Inquiries have been received from various parts of the country as to the exact meaning and scope of actuarial science as described in the rules of the board of examiners of the American Institute of Accountants, and a little dissatisfaction has been expressed at the decision to include what some correspondents seem to think is a new subject for an accounting examination.

In response to an inquiry from an accounting school the board of examiners stated that the scope of examination in actuarial science was to include problems relative to interest and annuities-certain, sinking funds, loans repayable by instalments, etc., and also the construction and use of tables relating thereto. In other words, the candidate will be expected to answer questions based upon a knowledge which will have been obtained in the study of algebra. Any candidate who has an intelligent conception of algebra should have no difficulty in answering the questions which will be propounded in actuarial science.

In the two most recent examinations of the institute there have been optional questions which required a rudimentary knowledge of actuarial science, and although we have no authority for such a belief, it may, we think, safely be inferred that when the questions in this science become compulsory, as they will in November next, the portion of the examination devoted to this one subject will probably not be any greater than it has been in the past year. The only difference will be that the candidate will be required to answer actuarial questions and if he does not do so will forfeit all marks for these questions, whereas in the

past he has been able to select other questions in place of those dealing with actuarial practice.

There is a great deal to be said in favor of the inclusion of actuarial problems and we believe that the need for knowledge of this kind will increase as time goes on. Heretofore there have been many accountants who have had practically no need to exercise any knowledge which they possessed of actuarial matters, but with the growth of accounting work and the broadening of its scope, there must come many problems which can be solved at a great saving of time and effort if the accountant be able to deal with them with the advantage of actuarial knowledge.

Every accountant finds it difficult to cope with the volume of work which is entailed upon him, particularly during this emergency, and anything which can serve as a time-saver is worthy of serious consideration. It seems, therefore, in electing to include actuarial science among the subjects for examination, that the board of examiners has done wisely.

The following texts have been recommended for the use of accountants in preparing for the examinations:

The Institute of Actuaries' Text Book, by George King; *Practical Lessons in Actuarial Science*, by Miles M. Dawson; *Manual of Actuarial Science*, by Ninian Glen; *Actuarial Theory*, by Wm. A. Robertson and Fred A. Ross.

Distribution of Personnel

Judging by the number of demands for accountants which emanate from all the government departments and from such auxiliary organizations as the Y. M. C. A., Red Cross, etc., there is nothing like the number of accountants in the country needed for the intelligent conduct of work arising from the present abnormal conditions. It is eminently gratifying that the accounting profession is coming into its own and those who have been connected with its growth and advancement thoroughly appreciate the wonderful opportunity which has come to the profession to demonstrate its ability and capacity, but there is another side to the picture.

If there are not enough accountants to go around, what is to be done? It seems to us that the same answer might be returned to this question which our grandmothers used to give us when

there were too many children for one dish of jam. We were told to spread it out thin.

It is evident that something like spreading them out thin must be done with the accountants if the work of the government is to be handled. In order to do this there must be an avoidance of duplication of effort. We must get away from the system or lack of system which has been so prevalent in Washington and must have some intelligent distribution of accounting ability so that while there may not be all that is needed for every department, there may be some for all departments. At the present time there are accounting divisions of every department, subdepartment, bureau, section and division in Washington and many in the field. In a great many cases the work of these departments can be combined in one center of which the personnel might be much less than the total of all departments now is. It would perhaps be too much to expect the government to avoid all unnecessary duplication of effort, but there should be a way by which the personnel can be distributed and a great portion of the duplication avoided.

We understand that there are many able accountants who are serving the government in the ranks. These men would probably prefer to remain where they are so as to have an opportunity to engage in the more glorious and attractive side of war, but it is possible for the government to divert their energies into fields where they would be of greater value. There are many other accountants who, in a spirit of patriotism and self-sacrifice, have offered their services to the government, some of them with commissions and some without, and, after getting to Washington or other place of assignment, have found that the duties required of them have been such as could be better handled by an ordinary office boy. We have heard of qualified accountants, partners of firms, who have been engaged in no more difficult task than simple checking of figures and running messages very much after the manner of the youngest boy in the office. This is sheer waste and, in view of the great scarcity of accounting ability, it is unpardonable waste.

We urge upon the government that it give consideration to the establishment of some central body which, in an advisory capacity, can assist in the distribution of accountants and the avoidance of wasted effort.

Need for Definition

In the April issue of THE JOURNAL OF ACCOUNTANCY we drew attention to the fact that there was a wide difference of interpretation of the word "accountant." We expressed the opinion that a bookkeeper should be described as a bookkeeper and an accountant as an accountant. Some correspondents have taken exception to the attempt to differentiate between accountants and bookkeepers. They have claimed that any man who keeps accounts is an accountant—and in the widest interpretation of the word this is true. But the point that was in mind when the editorial above mentioned was written was the need for educating the public to distinguish between the man who keeps accounts and the man who investigates. If there were any further need for demonstration of the unfortunate confusion of terms, it would be found in the recent decision of the provost-marshal general in which accountants were classified as non-essential. We do not believe that Provost-Marshal General Crowder had public accountants in mind when he made this apparently absurd ruling. He probably referred to bookkeepers and even in that classification there should have been some attempt to separate the thoroughly qualified man from the one who is a bookkeeper in name only. Almost every man out of a job is able to describe himself as a bookkeeper, and we believe General Crowder had this class in mind.

However, his ruling has already had an altogether unexpected result. A draft board in Chicago evidently interpreted the word accountant as we interpret it, namely, a public accountant, and has decided that a man in class 4 of the draft, employed on the staff of one of the larger accounting firms, was engaged in a non-essential industry and was instructed to change his employment. If the provost-marshal general had made his ruling in a more strictly technical way, this error of the draft board would probably not have occurred. (We, of course, shall assume that it is an error until the contrary is proven.) There is not an accounting office in the country that is not overworked; there is hardly a business which is not making demands for the assistance of accountants; and the government is a constant applicant for more and more accountants to do the work which no one but accountants can do.

In the circumstances, it is ridiculous to say that the government considers accountants unnecessary.

No doubt the provost-marshal general has been misinterpreted, and when the matter has been properly adjusted it will be found that his reference to accountants meant so-called bookkeepers, whose ability was not clearly shown. The fact remains, however, that the order has gone forth that accountants shall not be considered essential, and if the draft boards take the order literally, the government is likely to have even more trouble than it has had in obtaining the number of men required for real accounting work.

This matter has been brought to the attention of the secretary of war by the American Institute of Accountants and pending a decision from him nothing more can be said.

Income Tax Department

Edited by John B. Niven, C.P.A.

UNDISTRIBUTED NET INCOME TAX

Interest in income taxes at the present time is divided between the renovation of the revenue law and the assessment for the first time of the tax on undistributed corporate income under the existing law. Recommendations are so prolific and the course of legislation so vacillating that speculation as to the outcome of the forthcoming legislation would be idle. But the tax on undistributed income is of immediate practical concern because the time for filing the corporation undistributed income tax return, sixty days after six months after the close of the fiscal year, expires on August 29th for corporations which closed their books December 31, 1917; while for every corporation which had a fiscal year ending with the close of any month in 1917 other than December, the report for that portion of the fiscal year falling within the calendar year 1917 is due August 1st.

The intention of the tax is clear, namely, to prevent the accumulation of free surplus income by corporations to the sacrifice of the government's interest in the surtaxes bearing on it when distributed as dividends to stockholders; but the regulations for applying it and the form for reporting the disposition of the surplus income are marked by considerable ambiguity, not to say inconsistency.

The section (10b) of the income tax law imposing the tax is quoted in T. D. 2736 in these pages, and provides for a tax of 10 per cent. on net corporate income of the taxable year remaining undistributed six months after the close of the year—exempting the amounts actually invested or employed in the business, retained for employment in the reasonable requirements of the business, invested in obligations of the United States issued after September 1, 1917, or used to pay income taxes. The instructions for assessment of the tax are contained in article 238 of regulations 33 (herein following) in T. D. 2700, published in our June number (pp. 445-6), and most comprehensively in T. D. 2736, appearing in this issue.

Article 238 reads as follows:

In order to determine the amount of such net income subject to this tax, the increase in the surplus balance at the close of the taxable year, as compared with the surplus balance at the beginning of such year, shall be analyzed so to account for the disposition thereof in increase in assets, decrease in liabilities or in dividends, and the net increase in current assets over current liabilities shall be subject to the above tax of 10 per cent. unless it can be conclusively shown by the corporation that such increase is retained to provide for an actual increase in business or for additions to plant or the reduction of bonded or other fixed liabilities.

The instructions quoted and referred to call, first, for a determination of the form in which the surplus earned during the last taxable year is

held at the close of that year, and then for an account of its subsequent transformation as determined at a point of time six months later. Just what is to be considered as free surplus income at the close of the taxable year is as incompletely defined as what is "actually invested and employed in the business" or "retained for employment in the reasonable requirements of the business" six months later. The presumption, in Article 238, that the "net increase in current assets over current liabilities" in the taxable year is the taxable undistributed surplus, unless the contrary can be demonstrated, does some violence to commonly accepted financial and accounting principles. It is valid only so far as the increase is made up of cash balances beyond immediate and prospective needs. How to trace the disposition of the year's surplus with the detailed precision suggested by the form of the tax return (form 1112), or how to identify the components of the year's surplus six months later, when merged with the results of subsequent profits, is also clouded in vagueness. The procedure is replete with uncertainties, but we are assured by the treasury department that the issue of further general regulations is not contemplated, the authorities already referred to being considered sufficient. The occasion seems to be one for the use of a rather free interpretation of the intention of the law and the common-sense of the story told by the accounts, and by securing special rulings from the commissioner of internal revenue in extreme cases.

TREASURY DECISIONS

In addition to the seven treasury rulings taken from court decisions published in the July number (T. D. 2721-2726), four others (T. D. 2729-2732), received too late for insertion in the last issue, are now given. All relate to the act of October 3, 1913, and bear on the subject of corporate dividends in different aspects, in connection with the status of corporate surplus at March 1, 1913, the date of incidence of the law. A single dividend in final liquidation of a corporation's entire assets, these having been realized at a valuation created prior to March 1, 1913, is not taxable income to the stockholder (T. D. 2729) because it is merely a change in form, the return to him of the value of his surrendered stock at its intrinsic value at and before March 1, 1913, without a break in continuity. Similarly, in T. D. 2730, accumulations of surplus earnings prior to the effective date of the act are capital, not income, for the purposes of the act, and indistinguishable from increment due to appreciation in the value of the assets of the taxpayer. Thus, when paid by a subsidiary, out of its surplus accrued prior to March 1, 1913, to a parent corporation by whom the subsidiary is so completely owned and controlled as to constitute a practical merger, the dividend is not taxable income to the parent corporation. The unity of identity in this case means that the surplus, in substance, accrued to the parent corporation at the time of its growth, and underwent nothing more than a change in form, carried out by a paper transaction.

But the two cases just mentioned hinge on their peculiar facts—first, retirement of capital, and, second, merged identity. That dividends are normally under the 1913 act, a clearly defined element of income to stockholders, whether drawn from surplus accrued prior to March 1, 1913, or not, and whether paid in cash or in stock, is reaffirmed in T. D. 2731 and 2732. The intention of the act was "to tax the stockholder with respect to such accumulations only if and when and to the extent that his interest in them comes to fruition as income, in dividends declared." It is the

special declaration in the acts of 1916 and 1917 which frees from taxation dividends paid out of surplus accumulated prior to March 1, 1913; this exemption being held to apply only to the acts in which it appears, not to their forerunner.

The four decisions referred to (T. D. 2729-2732) as well as six of the preceding series (T. D. 2721-2726) have been reduced by the department into as many propositions of law and published in T. D. 2740, presented in this issue.

Another digest of principles is codified into the regulations by T. D. 2734, dealing with the determination of the gain or loss on the sale of stock received as a dividend. In the case of (a) stock received as a dividend in 1913, 1914 or 1915 (the period under the operation of the act of October 3, 1913) out of surplus, however created, or (b), stock received as a dividend in 1916 or later, out of surplus arising otherwise than from profits accrued since March 1, 1913 (as, for example, out of earnings accrued prior to March 1, 1913, or from surplus created by the revaluation of capital assets or by placing a value upon trade-marks, goodwill, etc.) or (c) stock in respect of which any stock dividend as described in (a) or (b) was paid,—the "cost" of each share whether old or new is the cost of the old stock divided by the total old and new shares. But because of the specific definition of stock dividends as income in the 1916 law, the cost of each share of stock received as a dividend in 1916 or subsequently, out of earnings accrued since March 1, 1913, is the valuation at which it was distributed on the corporate books and returned as individual income, i.e., par, while the cost of the old stock remains the same as before, regardless of any stock dividends.

How to proceed if you want to establish a replacement fund under T. D. 2706 (see June JOURNAL OF ACCOUNTANCY, pp. 458-9) for property requisitioned, lost or destroyed through war hazards is the subject of T. D. 2733.

Co-operative societies are declared by T. D. 2737 to be subject to the provisions of the income tax law, but their refunds, which are not true "dividends," are, as an element of cost, deductible from their taxable income and are not income, but a reduction in the cost of his purchases, to the recipient.

Any question as to the legality of determining income upon the basis of inventories taken at "cost or market value, whichever is lower" sanctioned in T. D. 2609 (see vol. 25, p. 128), and in T. D. 2649 (vol. 25, p. 204) is dismissed in T. D. 2744. The attorney general has advised that its propriety has been confirmed by the supreme court.

(T. D. 2729, June 11, 1918)

Income-tax act of October 3, 1913—Decision of the supreme court

1. Taxable income.

Where the capital assets of a corporation increased in value prior to March 1, 1913, and a single and final dividend was made in liquidation of the entire assets in 1914, without further appreciation or addition to the assets having occurred, no part of the dividend received by a stockholder is taxable under the act of October 3, 1913.—*Collector vs. Hubbard* (12 Wall., 1), and *Bailey vs. Railroad Co.* (22 Wall., 604; 106 U. S., 109) discussed.

2. Judgment affirmed.

The judgment of the circuit court of appeals is affirmed.

The appended decision of the United States supreme court in the case of *E. J. Lynch, as collector of internal revenue, vs. Henry Turrish,* is published for the information of internal-revenue officers and others concerned.

SUPREME COURT OF THE UNITED STATES. No. 421. OCTOBER TERM, 1917.

E. J. Lynch, collector of internal revenue for the district of Minnesota, petitioner, vs. Henry Turrish

On writ of certiorari to the United States circuit court of appeals for the eighth circuit
[June 3, 1918]

Mr. Justice McKenna delivered the opinion of the court:

Suit to recover an income tax, paid under protest, assessed under the act of October 3, 1913, 38 Stat. 166.

The facts, as admitted by demurrer, are these: Respondent, Turrish, who was plaintiff in the trial court, made a return of his income for the calendar year 1914 which showed that he had no net income for that year; afterwards the commissioner of internal revenue made a supplemental assessment showing that he had received a net income of $32,712.08, which, because of specific deductions and exemptions, resulted in no normal tax, but as the net income exceeded the sum of $20,000, the commissioner assessed an additional or super tax of one per cent. upon the excess, resulting in a tax of $127.12, which was sought to be recovered. The reassessment was based upon certain sums received by the plaintiff in the year 1914 as distributions from corporations subject to the income-tax law and held by the commissioner to be income derived from dividends received by the plaintiff on stock of domestic corporations; of which the sum $79,975, received as a distribution from the Payette Lumber & Manufacturing Co., and without which no tax could have been levied against the plaintiff, is here in dispute.

Prior to March 1, 1913, and continuously thereafter until the surrender of his stock as hereinafter mentioned, plaintiff was a stockholder in the Payette Co., which was organized in the year 1903 with power to buy, hold, and sell timberlands, and in fact never engaged in any other business than this except minor businesses incidental to it. Immediately after its organization this company began to invest in timberlands, and prior to March 1, 1913, had thus invested approximately $1,375,000.

On March 1, 1913, the value of its assets was not less than $3,000,000, of which sum the value of the timberlands was not less than $2,875,000. The increase was due to the gradual rise in the market value of the lands. At that date the value of Turrish's stock was twice its par value, or $159,950, and about that time he and all the other stockholders gave an option to sell their stock for twice its par value. The holders of the option formed another company, called the Boise-Payette Lumber Co., and transferred the options to it. The options having been extended to December 31, 1913, the new company informed the Payette Co. and its stockholders shortly before this date that instead of exercising the option it preferred and proposed to purchase all of the assets of the Payette Co., paying to that company such a purchase price that there would be available for distribution to its stockholders twice the par value of their stock. The stockholders by resolution authorized this sale, and, pursuant to this and a resolution of the directors, the Payette Co. transferred to the new company all of its assets, property, and franchises, and upon the completion of the transaction found itself with no assets or property, except cash to the amount of double the par value of its stock which had been paid to it by the new company, and with no debt, liabilities, or obligations except those which the new company had assumed. The cash was distributed to the stockholders on the surrender of their certificates of stock, and the company went out of business. In this way, upon the surrender of his shares, Turrish received $159,950, being double their par value.

The commissioner of internal revenue considered that of this sum one-half was not taxable, being the liquidation of the par value of Turrish's

stock, but that the other half was income for the year 1914 and taxable under the act of 1913.

The question in the case is thus indicated. The district court took a different view from that of the commissioner of internal revenue and therefore overruled the demurrer to Turrish's complaint and entered judgment for him for the sum prayed, which judgment was affirmed by the circuit court of appeals for the eighth circuit. (236 Fed., 653.)

The point in the case seems a short one. It, however, has provoked much discussion on not only the legal but the economic distinction between capital and income and by what processes and at what point of time the former produces or becomes the latter. And this in resolution of a statute which concerns the activities of men and intended, it might be supposed, to be without perplexities and readily solvable by the offhand conceptions of those to whom it was addressed.

The provisions of the act, so far as material to be noticed, are the following: That there is assessed "upon the entire net income arising or accruing from all sources in the preceding calendar year to every . . . person residing in the United States . . . a tax of one per centum per annum upon such income . . ." (Par. A, subdiv. 1.)

In addition to that tax, which is denominated the normal income tax, it is provided that there shall be levied "upon the net income of every individual an additional tax . . . of one per centum per annum upon the amount by which the total net income exceeds" certain amounts, and the person subject to the tax is required to make a personal return of his total net income from all sources under rules and regulations to be prescribed by the commissioner of internal revenue. (Subdiv. 2.)

By paragraph B it is provided that, subject to certain exemptions and deductions, "the net income of a taxable person shall include gains, profits, and income derived from salaries, wages, or compensation for personal service . . . also from interest, rent, dividends, securities, or the transaction of any lawful business carried on for gain or profit, or gains or profits and income derived from any source whatever."

After specifying the exemptions and deductions allowed, the law declares as follows:

The said tax shall be computed upon the remainder of said net income of each person subject thereto, accruing during each preceding calendar year ending December thirty-first: Provided, however, that for the year ending December thirty-first, nineteen hundred and thirteen, said tax shall be computed on the net income accruing from March first to December thirty-first, nineteen hundred and thirteen, both dates inclusive . . . (Par D.)

It will be observed, therefore that the statute levies a normal tax and an additional tax upon net incomes, derived from whatever source, "arising or accruing" each preceding calendar year ending December 31, except that for the year ending December 31, 1913, the tax shall be computed on the net income accruing from March 1, 1913, to December 31, 1913.

And in determining the application of the statute to Turrish we must keep in mind that on the admitted facts the distribution received by him from the Payette Co. manifestly was a single and final dividend in liquidation of the entire assets and business of the company, a return to him of the value of his stock upon the surrender of his entire interest in the company, and at a price that represented its intrinsic value at and before March 1, 1913, when the act took effect.

The district court and the circuit court of appeals decided that the amount so distributed to Turrish was not income within the meaning of the statute, basing the decision on two propositions, as expressed in the opinion of the circuit court of appeals, by Sanborn, circuit judge—(a) The amount was the realization of an investment made some years before, representing its gradual increase during those years, and which reached its height before the effective date of the law, that is, before March 1, 1913, and the mere change of form of the property "as from real to personal

property, or from stock to cash" was not income to its holders because the value of the property was the same after as before the change; (b) the timberlands were the property, capital, and capital assets of their legal and equitable owner and the enhancement of their value during a series of years "prior to the effective date of the income-tax law, although divided or distributed by dividend or otherwise subsequent to that date, does not become income, gains, or profits taxable under such an act."

For proposition "a" the court cited *Collector vs. Hubbard* (12 Wall., 1); *Bailey vs. Railroad Company* (22 Wall., 604, and the same case in 106 U. S., 109). For proposition "b" *Gray vs. Darlington* (15 Wall., 63), was relied on.

The government opposes both contentions by an elaborate argument containing definitions of capital and income drawn from legal and economic sources and given breadth to cover a number of other cases submitted with this. The argument, in effect, makes any increase of value of property income, emerging as such and taxable at the moment of realization by sale or some act of separation, as by dividend declared or by distribution, as in the instant case.

To sustain the argument these definitions are presented:

1. Capital is anything, material or otherwise, capable of ownership, viewed in its static condition at a moment of time, or the rights of ownership therein.

2. Income is the service or return rendered by capital during a period of time. . . .

4. Net income ("profits") is the difference between income and outgo.

. . .

7. In the actual production and distribution of capital there is a constant conversion of capital into income, and vice versa.

8. The attempt to conceal this conversion by treating "income" as the standard return from intact "capital" only leads to confusion of the value of capital with capital itself.

From these definitions are deduced the following propositions, which are said to be decisive of the problems in the cases:

1. Income being derived from the use of capital, the conversion or transfer of capital always produces income.

2. Mere appreciation of capital value does not produce "income," nor mere depreciation "outgo."

3. Net income is the difference between actual "income" and actual "outgo."

4. Income is not confined to money income, but includes anything capable of easy valuation in money.

It will be observed that the breadth of definition and the breadth of application are necessary to the refutation of the reasoning of the circuit court of appeals. There is direct antagonism, the court basing its reliance, it says, upon what it asserts is the common sense and understanding of the words of the law, and the exposition of like laws by the decisions of this court. The government's resource is the discussion of economists and the fact, concrete and practical, of wealth not only increased but come to actual hand. The instant case is an example. Turrish's stock doubled in value. He paid for it $79,975.00; he received $159,950.00. It requires a struggle to resist the influence of the fact, but we are aided and fortified by our own precedents and saved from such intricate and subtle discussion and an elaborate review of other cases cited in confirmation or opposition.

In *Collector vs. Hubbard,* supra, the distinction between a corporation and its stockholders was recognized and that the stockholder had no title for certain purposes to the earnings of the corporation, net or other, prior to a dividend being declared, but they might become capital by investment in permanent improvements and thereby increase the market value of the shares, "whether held by the original subscribers or by assignees." In

other words, it was held that the investments of the corporation were the investments of the stockholders; that is, the stockholders could have an interest, taxable under the act considered, though not identical with the corporation. This was repeated in *Bailey vs. Railroad Co.* (22 Wall., 604, 635, 636).

The latter case came here again in 106 U. S., 109, and it was then declared that the purpose of an income tax law was to tax the income for the year that it accrued; in other words, no tax in contemplation of the law accrues upon something except for the year in which that something—earnings, profits, gains or income—accrues. In that case the subject of the tax was a scrip dividend, but the certificates did not show the year of the earnings and testimony as to the particular year was admitted. The principle applies to the case at bar. If increase in value of the lands was income, it had its particular time and such time must have been within the time of the law to be subject to the law, that is, it must have been after March 1, 1913. But, according to the fact admitted, there was no increase after that date and therefore no increase subject to the law. There was continuity of value, not gain or increase. In the first proposition of the court of appeals we, therefore, concur.

In support of its second proposition it adduced, as we have seen, *Gray vs. Darlington* (15 Wall., 63). The case arose under the income tax law of 1867, which levied "upon the gains, profits, and income of every person, . . . whether derived from any kind of property . . . or from any other source whatever . . . a tax of 5 per centum on the amount so derived over $1,000 . . . for the year ending the thirty-first of December next preceding the time for levying, collecting and paying said tax."

Darlington, in 1865, being the owner of certain United States treasury notes, exchanged them for United States bonds. In 1869 he sold the bonds at an advance of $20,000 over the cost of the notes and upon this amount was levied a tax of 5 per centum as gains, profits, and income for that year. He paid the tax under protest and sued to recover, and prevailed. This court, by Mr. Justice Field, said:

The question presented is whether the advance in the value of the bonds, during this period of four years, over their cost, realized by their sale, was subject to taxation as gains, profits or income of the plaintiff for the year in which the bonds were sold. The answer which should be given to this question does not, in our judgment, admit of any doubt. The advance in the value of property during a series of years can, in no just sense, be considered the gains, profits or income of any one particular year of the series, although the entire amount of the advance be at one time turned into money by the sale of the property. The statute looks, with some exceptions, for subjects of taxation only to annual gains, profits and income.

And again:

The mere fact that property has advanced in value between the date of its acquisition and sale does not authorize the imposition of a tax on the amount of the advance. Mere advance in value in no sense constitutes the gains, profits, or income specified by the statute. It constitutes and can be treated merely as increase of capital.

This case has not been since questioned or modified.

The government feels the impediment of the case and attempts to confine its ruling to the exact letter of the act of March 2, 1867, and thereby distinguish that act from the act of 1913 and give to the latter something of retrospective effect. Opposed to this there is a presumption, resistless except against an intention imperatively clear. The government, however, makes its view depend upon disputable differences between certain words of the two acts. It urges that the act of 1913 makes the income taxed one "arising or accruing" in the preceding calendar year, while the act of

1867 makes the income one "derived." Granting that there is a shade of difference between the words, it can not be granted that congress made that shade a criterion of intention and committed the construction of its legislation to the disputes of purists. Besides, the contention of the government does not reach the principle of *Gray vs. Darlington,* which is that the gradual advance in the value of property during a series of years in no just sense can be ascribed to a particular year, not therefore as "arising or accruing," to meet the challenge of the words, in the last one of the years, as the government contends, and taxable as income for that year or when turned into cash. Indeed, the case decides that such advance in value is not income at all, but merely increase of capital and not subject to a tax as income.

We concur, therefore, in the second proposition of the circuit court of appeals as well as in the first and affirm the judgment.

Mr. Justice Brandeis and Mr. Justice Clarke concur in the result.

(T. D. 2730, June 11, 1918)

Income-tax act of October 3, 1913—Decision of the supreme court

1. Intention of the act.

   It is the evident purpose of the act to refrain from taxing income that accrued prior to March 1, 1913, and to exclude from consideration in making computation of taxable income for a given year any income that accrued in the preceding taxable year.

2. Act of June 30, 1864, compared and distinguished.

   The income tax act of June 30, 1864, contains special language, different from the 1913 act, which distinguishes the case of *Collector vs. Hubbard* (12 Wall., 1), from the present case.

3. Taxability of dividends from subsidiary corporation.

   Where a corporation is the owner of all the stock in a subsidiary company and the lessee of all its property, regularly maintaining possession, control, and management of all the subsidiary's money and other property, so that the subsidiary is a mere agent of the other corporation and is practically merged therewith, dividends of the subsidiary declared out of a surplus which accrued prior to March 1, 1913, are not taxable income of the parent corporation.

4. Effect of decision limited.

   This case turns on its peculiar facts. *Pullman Car Co. vs. Missouri Pacific Co.* (115 U. S., 587); *Peterson vs. Chicago, Rock Island & Pacific Railway* (206 U. S., 364), are distinguishable.

5. Judgment reversed.

The judgment of the district court is reversed, and the cause remanded for further proceedings.

The appended decision of the United States supreme court in the case of *Southern Pacific Co. vs. John Z. Lowe, jr.,* as collector of internal revenue, is published for the information of internal-revenue officers and others concerned.

SUPREME COURT OF THE UNITED STATES. No. 452. OCTOBER TERM, 1917

Southern Pacific Co., plaintiff in error, vs. John Z. Lowe, jr., United States collector of internal revenue for the second district of New York

In error to the district court of the United States for the southern district of New York

[June 3, 1918]

Mr. Justice Pitney delivered the opinion of the court:

This case presents a question arising under the federal income-tax act of October 3, 1913 (ch. 16, 38 Stat., 114, 166). Suit was brought by plaintiff in error against the collector to recover taxes assessed against it

and paid under protest. There were two causes of action, of which only the second went to trial, it having been stipulated that the trial of the other might be postponed until the final determination of this one. So far as it is presented to us, the suit is an effort to recover a tax imposed upon certain dividends upon stock, in form received by the plaintiff from another corporation in the early part of the year 1914, and alleged by the plaintiff to have been paid out of a surplus accumulated not only prior to the effective date of the act but prior to the adoption of the sixteenth amendment to the constitution of the United States. The district court directed a verdict and judgment in favor of the collector (238 Fed. Rep., 847), and the case comes here by direct writ of error under section 238, judicial code, because of the constitutional question. That our jurisdiction was properly invoked is settled by *Towne vs. Eisner* (245 U. S., 418, 425).

The case was submitted at the same time with several other cases arising under the same act and decided this day, viz.: *Lynch, collector, vs. Turrish*, and *Lynch, collector, vs. Hornby,* and *Peabody vs. Eisner, collector.*

The material facts are as follows: Prior to January 1, 1913, and at all times material to the case, plaintiff, a corporation organized under the laws of the state of Kentucky, owned all the capital stock of the Central Pacific Railway Co., a corporation of the state of Utah, including the stock registered in the names of the directors.* This situation existed continuously from the incorporation of the railway company in the year 1899. That company is the successor of the Central Pacific Railroad Co. and acquired all of its properties, which constitute a part of a large system of railways owned or controlled by the Southern Pacific Co. The latter company, besides being sole stockholder, was in the actual physical possession of the railroads and all other assets of the railway company, and in charge of its operations, which were conducted in accordance with the terms of a lease made by the predecessor company to the Southern Pacific and assumed by the railway company, the effect of which was that the Southern Pacific should pay to the lessor company $10,000 per annum for organization expenses, should operate the railroads, branches, and leased lines belonging to the lessor, and account annually for the net earnings, and if these exceeded 6 per cent. on the existing capital stock of the lessor the lessee should retain to itself one-half of the excess; advances by the lessee for account of the lessor were to bear lawful interest, and the lessee was to be entitled at any time and from time to time to refund to itself its advances and interest out of any net earnings which might be in its hands. The provisions of the lease were observed by both corporations for bookkeeping purposes. The Southern Pacific acted as cashier and banker for the entire system; the Central Pacific kept no bank account, its earnings being deposited with the bank account of the Southern Pacific; and if the Central Pacific needed money for additions and betterments or for making up a deficit of current earnings the necessary funds were advanced by the Southern Pacific. As a result of these operations and of the conversion of certain capital assets of the Central Pacific Co., that company showed upon its books a large surplus accumulated prior to January 1, 1913, principally in the form of a debit against the Southern Pacific, which at the same time, as sole stockholder, was entitled to any and all dividends that might be declared, and being in control of the board of directors was able to and did control the dividend policy. The dividends in question were declared and paid during the first six months of the year 1914 out of this surplus of the Central Pacific accumulated prior to January 1, 1913; but the payment was only constructive, being carried into effect by bookkeeping entries which simply reduced the apparent surplus of the Central Pacific

*There was another question, concerning a dividend paid by the Reward Oil Co., whose stock likewise was owned by the Southern Pacific Co., but the contention of plaintiff in error respecting this item has been abandoned.

and reduced the apparent indebtedness of the Southern Pacific to the Central Pacific by precisely the amount of the dividends.

The question is whether the dividends received under these circumstances and in this manner by the Southern Pacific Co. were taxable as income of that company under the income tax act of 1913.*

The act provides in section 2, paragraph A, subdivision 1 (38 Stat., 166), "that there shall be levied, assessed, collected and paid annually upon the entire net income arising or accruing from all sources in the preceding calendar year" to every person residing in the United States a tax of 1 per cent. per annum, with exceptions not now material. By paragraph G (a) (p. 172), it is provided "that the normal tax herein, before imposed upon individuals [1 per cent.] likewise shall be levied, assessed, and paid annually upon the entire net income arising or accruing from all sources during the preceding calendar year to every corporation . . . organized in the United States," with other provisions not now material.

It is provided in paragraph G (b), as to domestic corporations, that such net income shall be ascertained by deducting from the gross amount of the income of the corporation (1) ordinary and necessary expenses paid within the year in the maintenance and operation of its business and properties, including rentals and the like; (2) losses sustained within the year and not compensated by insurance or otherwise, including a reasonable allowance for depreciation by use, wear and tear of property, if any, and in the case of mines a certain allowance for depletion of ores and other natural deposits; (3) interest accrued and paid within the year upon indebtedness of the corporation, within the prescribed limits; (4) national and state taxes paid. It will be observed that moneys received as dividends upon the stock of other corporations are not deducted, as they are in computing the income of individuals for the purpose of the normal tax under this act (p. 167), and as they were in computing the income of a corporation under the excise tax act of August 5, 1909 (ch. 6, 36 Stat., 11, 113, sec. 38).

By paragraph G (c) the tax upon corporations is to be computed upon the entire net income accrued within each calendar year, but for the year 1913 only upon the net income accrued from March 1 to December 31, to be ascertained by taking five-sixths of the entire net income for the calendar year.

The purpose to refrain from taxing income that accrued prior to March 1, 1913, and to exclude from consideration in making the computation any income that accrued in a preceding calendar year, is made plain by the provision last referred to; indeed, the sixteenth amendment, under which for the first time congress was authorized to tax income from property without apportioning the tax among the states according to population, received the approval of the requisite number of states only in February, 1913. (*Pollock vs. Farmers' Loan & Trust Co.*, 157 U. S., 429, 581; 158 U. S., 601, 637; *Brushaber vs. Union Pacific Railroad*, 240 U. S., 1, 16.)

We must reject in this case, as we have rejected in cases arising under the corporation excise tax act of 1909 (*Doyle, collector, vs. Mitchell Bros. Co.*, and *Hays, collector, vs. Gauley Mountain Coal Co.*, decided May 20, 1918), the broad contention submitted in behalf of the government that all receipts—everything that comes in—are income within the proper definition of the term "gross income," and that the entire proceeds of a conversion of capital assets, in whatever form and under whatever circumstances accomplished, should be treated as gross income. Certainly the term "income" has no broader meaning in the 1913 act than in that of 1909 (see *Stratton's Independence vs. Howbert*, 231 U. S., 399, 416, 417), and for

*In addition, a question was made in the district court as to a special dividend declared by the Central Pacific out of the proceeds of sale of certain land on Long Island, taken in satisfaction of a debt and sold in December, 1913. As to this, however, no argument is submitted by plaintiff in error, the facts are not clear, and we pass it without consideration.

the present purpose we assume there is no difference in its meaning as used in the two acts. This being so, we are bound to consider accumulations that accrued to a corporation prior to January 1, 1913, as being capital, not income, for the purposes of the act. And we perceive no adequate ground for a distinction, in this regard, between an accumulation of surplus earnings and the increment due to an appreciation in value of the assets of the taxpayer.

That the dividends in question were paid out of a surplus that accrued to the Central Pacific prior to January 1, 1913, is undisputed; and we deem it to be equally clear that this surplus accrued to the Southern Pacific Co. prior to that date, in every substantial sense pertinent to the present inquiry, and hence underwent nothing more than a change of form when the dividends were declared.

We do not rest this upon the view that for the purposes of the act of 1913 stockholders in the ordinary case have the same interest in the accumulated earnings of the company before as after the declaration of dividends. The act is quite different in this respect from the income tax act of June 30, 1864 (ch. 173, 13 Stat., 223, 281, 282), under which this court held, in *Collector vs. Hubbard* (12 Wall., 1, 16), that an individual was taxable upon his proportion of the earnings of the corporation although not declared as dividends. That decision was based upon the very special language of a clause of section 117 of the act (13 Stat., 282) that "the gains and profits of all companies, whether incorporated or partnership, other than the companies specified in this section, shall be included in estimating the annual gains, profits, or income of any person entitled to the same, whether divided or otherwise." The act of 1913 contains no similar language, but on the contrary deals with dividends as a particular item of income, leaving them free from the normal tax imposed upon individuals, subjecting them to the graduated surtaxes only when received as dividends (38 Stat., 167, par. B), and subjecting the interest of an individual shareholder in the undivided gains and profits of his corporation to these taxes only in case the company is formed or fraudulently availed of for the purpose of preventing the imposition of such tax by permitting gains and profits to accumulate instead of being divided or distributed.* Our view of the effect of this act upon dividends received by the ordinary stockholder after it took effect but paid out of a surplus that accrued to the corporation before that event is set forth in *Lynch, collector, vs. Hornby,* decided this day.

We base our conclusion in the present case upon the view that it was the purpose and intent of congress, while taxing "the entire net income arising or accruing from all sources" during each year commencing with the first day of March, 1913, to refrain from taxing that which, in mere form only, bore the appearance of income accruing after that date, while in truth and in substance it accrued before; and upon the fact that the Central Pacific and the Southern Pacific were in substance identical because of the complete ownership and control which the latter possessed over the former, as stockholder and in other capacities. While the two companies were separate legal entities, yet in fact, and for all practical purposes they were merged, the former being but a part of the latter, acting merely as its

* "For the purpose of this additional tax the taxable income of any individual shall embrace the share to which he would be entitled of the gains and profits, if divided or distributed, whether divided or distributed or not, of all corporations, joint-stock companies, or associations however created or organized, formed or fraudulently availed of for the purpose of preventing the imposition of such tax through the medium of permitting such gains and profits to accumulate instead of being divided or distributed; and the fact that any such corporation . . . is a mere holding company, or that the gains and profits are permitted to accumulate beyond the reasonable needs of the business shall be prima facie evidence of a fraudulent purpose to escape such tax; but the fact that the gains and profits are in any case permitted to accumulate and become surplus shall not be construed as evidence of a purpose to escape the said tax in such case unless the secretary of the treasury shall certify that in his opinion such accumulation is unreasonable for the purposes of the business." (38 Stat., 166, 167.)

agent and subject in all things to its proper direction and control. And, besides, the funds represented by the dividends were in the actual possession and control of the Southern Pacific as well before as after the declaration of the dividends. The fact that the books were kept in accordance with the provisions of the lease, so that these funds appeared upon the accounts as an indebtedness of the lessee to the lessor, can not be controlling, in view of the practical identity between lessor and lessee. Aside from the interests of creditors and the public—and there is nothing to suggest that the interests of either were concerned in the disposition of the surplus of the Central Pacific—the Southern Pacific was entitled to dispose of the matter as it saw fit. There is no question of there being a surplus to warrant the dividends at the time they were made, hence any speculation as to what might have happened in case of financial reverses that did not occur is beside the mark.

It is true that in ordinary cases the mere accumulation of an adequate surplus does not entitle a stockholder to dividends until the directors in their discretion declare them. *New York, etc., Railroad vs. Nickals* (119 U. S., 296, 306); *Gibbons vs. Mahan* (136 U. S., 549, 558). And see *Humphreys vs. McKissock* (140 U. S., 304, 312). But this is not the ordinary case. In fact the discretion of the directors was affirmatively exercised by declaring dividends out of the surplus that was accumulated prior to January 1, 1913; it does not appear that any other fair exercise of discretion was open; and the complete ownership and right of control of the Southern Pacific at all times material makes it a matter of indifference whether the vote was at one time or another. Under the circumstances, the entire matter of declaration and payment of the dividends was a paper transaction to bring the books into accord with the acknowledged rights of the Southern Pacific; and so far as the dividends represented the surplus of the Central Pacific that accumulated prior to January 1, 1913, they were not taxable as income of the Southern Pacific within the true intent and meaning of the act of 1913.

The case turns upon its very peculiar facts, and is distinguishable from others in which the question of the identity of a controlling stockholder with his corporation has been raised. *Pullman Car Co. vs. Missouri Pacific Co.* (115 U. S., 587, 596); *Peterson vs. Chicago, Rock Island & Pacific Railway* (205 U. S., 364, 391).

Judgment reversed, and the cause remanded for further proceedings in conformity with this opinion.

Mr. Justice Clarke dissents.

(T. D. 2731, June 11, 1918)

Income tax act of October 3, 1913—Decision of the supreme court

1. Taxing power under sixteenth amendment.

   Under the sixteenth amendment to the constitution, congress has power to tax as income, without apportionment, everything that became income in the ordinary sense of the word after the adoption of the amendment.

2. Retroactive report.

   The retroactivity of the act to March 1, 1913—a date not prior to the adoption of the amendment—is permissible. *Brushaber vs. Union Pacific Railroad* (240 U. S., 1) approved.

3. Taxable income.

   An individual stockholder is subject to the additional tax under the 1913 act on all dividends declared and paid by a corporation in the ordinary course of business after the taking effect of the act, whether from current earnings or from the accumulated surplus made up of past earnings or increase in value of corporate assets, notwithstanding the surplus accrued to the corporation in whole or in part prior to March 1, 1913.

4. Cases distinguished.

   Lynch, collector, vs. Turrish, decided by the supreme court June 3, 1918, and *Southern Pacific Railway Co. vs. Lowe, collector,* decided by the supreme court June 3, 1915, rest upon their special facts, and are plainly distinguishable.

5. The act of September 8, 1916, and the act of October 3, 1917, discussed.

   The act of September 8, 1916, and the act of October 3, 1917, in excluding dividends declared out of earnings or profits accrued prior to March 1, 1913, are not intended to be declaratory of the meaning of the term "dividends" in the 1913 act.

6. Judgment reversed.

   The judgment of the circuit court of appeals is reversed, and the cause remanded to the district court for further proceedings.

The appended decision of the United States supreme court in the case of *E. J. Lynch, as collector of internal revenue, vs., H. C. Hornby* is published for the information of internal-revenue officers and others concerned.

SUPREME COURT OF THE UNITED STATES. No. 422. OCTOBER TERM, 1917

E. J. Lynch, collector of internal revenue for the district of Minnesota, petitioner, vs. H. C. Hornby

On a writ of certiorari to the United States circuit court of appeals for the eighth circuit

[June 3, 1918]

Mr. Justice Pitney delivered the opinion of the court:

Hornby, the respondent, recovered a judgment in the United States district court against Lynch, as collector of internal revenue, for the return of $171, assessed as an additional income tax under the act of October 3, 1913 (ch. 16, 38 Stat., 114, 166), and paid under protest. The circuit court of appeals affirmed the judgment (236 Fed., 661), and the case comes here on certiorari. It was submitted at the same time with *Lynch, collector, vs. Turrish, Southern Pacific Co. vs. Lowe, collector,* and *Peabody vs. Eisner, collector,* arising under the same act, and this day decided.

The facts, in brief, are as follows: Hornby, from 1906 to 1915, was the owner of 434 (out of 10,000) shares of the capital stock of the Cloquet Lumber Co., an Iowa corporation, which for more than a quarter of a century had been engaged in purchasing timber lands, manufacturing the timber into lumber and selling it. Its shares had a par value of $100 each, making the entire capital stock $1,000,000. On and prior to March 1, 1913, by the increase of the value of its timber lands and through its business operations, the total property of the company had come to be worth $4,000,000, and Hornby's stock, the par value of which was $43,400, had become worth at least $150,000. In the year 1914 the company was engaged in cutting its standing timber, manufacturing it into lumber, selling the lumber, and distributing the proceeds among its stockholders. In that year it thus distributed dividends aggregating $650,000, of which $240,000, or 24 per cent. of the par value of the capital stock, was derived from current earnings, and $410,000 from conversion into money of property that it owned or in which it had an interest, on March 1, 1913. Hornby's share of the latter amount was $17,794, and this not having been included in his income tax return, the commissioner of internal revenue levied an additional tax of $171 on account of it, and this forms the subject of the present suit.

The case was tried in the district court and argued in the circuit court of appeals together with *Lynch, collector, vs. Turrish* (236 Fed., 653), and was treated as presenting substantially the same question upon the merits. In our opinion it is distinguishable from the Turrish case, where the distribution in question was a single and final dividend received by Turrish from the Payette Co. in liquidation of the entire assets and business of the

company and a return to him of the value of his stock upon the surrender of his entire interest in the company, at a price that represented its intrinsic value at and before March 1, 1913, when the income tax act took effect.

In the present case there was no winding up or liquidation of the Cloquet Lumber Co. nor any surrender of Hornby's stock. He was but one of many stockholders, and had but the ordinary stockholders' interest in the capital and surplus of the company—that is, a right to have them devoted to the proper business of the corporation and to receive from the current earnings or accumulated surplus such dividends as the directors in their discretion might declare. *Gibbons vs. Mahon* (136 U. S., 549, 557). The operations of this company in the year 1914 were, according to the facts pleaded, of a nature essentially like those in which it had been engaged for more than a quarter of a century. The fact that they resulted in converting into money, and thus setting free for distribution as dividends, a part of its surplus assets accumulated prior to March 1, 1913, does not render Hornby's share of those dividends any the less a part of his income within the true intent and meaning of the act, the pertinent language of which is as follows (38 Stat., 166, 167):

A. Subdivision 1. That there shall be levied, assessed, collected, and paid annually upon the entire net income arising or accruing from all sources in the preceding calendar year to every citizen of the United States, . . . and to every person residing in the United States, . . . a tax of 1 per centum per annum upon such income, except as hereinafter provided: . . .

B. That, subject only to such exemptions and deductions as are hereinafter allowed, the net income of a taxable person shall include gains, profits and income derived from salaries, wages or compensation for personal service, . . . also from interest, rent, dividends, securities, or the transaction of any lawful business carried on for gain or profit, or gains or profits and income derived from any source whatever.

Among the deductions allowed for the purpose of the normal tax is "seventh, the amount received as dividends upon the stock or from the net earnings of any corporation, . . . which is taxable upon its net income as hereinafter provided." There is a graduated additional tax, commonly known as a "surtax," upon net income in excess of $20,000, including income from dividends, and for the purpose of this additional tax "the taxable income of any individual shall embrace the share to which he would be entitled of the gains and profits, if divided or distributed, whether divided or distributed or not, of all corporations . . . formed or fraudulently availed of for the purpose of preventing the imposition of such tax through the medium of permitting such gains and profits to accumulate instead of being divided or distributed."

It is evident that congress intended to draw and did draw a distinction between a stockholder's undivided share or interest in the gains and profits of a corporation prior to the declaration of a dividend, and his participation in the dividends declared and paid, treating the latter in ordinary circumstances as a part of his income for the purposes of the surtax, and not regarding the former as taxable income unless fraudulently accumulated for the purpose of evading the tax.

This treatment of undivided profits applies only to profits permitted to accumulate after the taking effect of the act, since only with respect to these is a fraudulent purpose of evading the tax predicable. Corporate profits that accumulated before the act took effect stand on a different footing. As to these, however, just as we deem the legislative intent manifest to tax the stockholder with respect to such accumulations only if and when and to the extent that his interest in them comes to fruition as income — that is, in dividends declared —so we can perceive no constitutional obstacle that stands in the way of carrying out this intent when dividends are declared out of a pre-existing surplus. The act took effect on March, 1, 1913, a few

days after the requisite number of states had given approval to the sixteenth amendment, under which for the first time congress was empowered to tax income from property without apportioning the tax among the states according to population. *Southern Pacific Co. vs. Lowe,* supra. That the retroactivity of the act from the date of its passage (Oct. 3, 1913) to a date not prior to the adoption of the amendment was permissible is settled by *Brushaber vs. Union Pacific Railroad* (240 U. S., 1, 20). And we deem it equally clear that congress was at liberty under the amendment to tax as income, without apportionment, everything that became income in the ordinary sense of the word after the adoption of the amendment, including dividends received in the ordinary course by a stockholder from a corporation, even though they were extraordinary in amount and might appear upon analysis to be a mere realization in possession of an inchoate and contingent interest that the stockholder had in a surplus of corporate assets previously existing. Dividends are the appropriate fruit of stock ownership, are commonly reckoned as income, and are expended as such by the stockholder without regard to whether they are declared from the most recent earnings or from a surplus accumulated from the earnings of the past or are based upon the increased value of the property of the corporation. The stockholder is in the ordinary case a different entity from the corporation, and congress was at liberty to treat the dividends as coming to him ab extra and as constituting a part of his income when they came to hand.

Hence we construe the provision of the act that "the net income of a taxable person shall include gains, profits, and income derived from . . . interest, rent, dividends, . . . or gains or profits and income derived from any source whatever" as including (for the purposes of the additional tax) all dividends declared and paid in the ordinary course of business by a corporation to its stockholders after the taking effect of the act (Mar. 1, 1913), whether from current earnings or from the accumulated surplus made up of past earnings or increase in value of corporate assets, notwithstanding it accrued to the corporation in whole or in part prior to March 1, 1913. In short, the word "dividends" was employed in the act as descriptive of one kind of gain to the individual stockholder, dividends being treated as the tangible and recurrent returns upon his stock, analogous to the interest and rent received upon other forms of invested capital.

In the more recent income-tax acts, provisions have been inserted for the purpose of excluding from the effect of the tax any dividends declared out of earnings or profits that accrued prior to March 1, 1913. This originated with the act of September 8, 1916, and has been continued in the act of October 3, 1917.* We are referred to the legislative history of

*In act of September 8, 1916 (Ch. 463, 39 Stat., 756, 757), which took the place of the act of 1913, the substance of what we have quoted from paragraph B of the 1913 act was embodied in sec. 2 (a), but with this proviso: "Provided, that the term 'dividends' as used in this title shall be held to mean any distribution made or ordered to be made by a corporation . . . *out of its earnings or profits accrued since March first, nineteen hundred and thirteen,* and payable to its shareholders, whether in cash or in stock of the corporation," etc. And by the act of October 3, 1917 (Ch. 63, 40 Stat., 300, 329, 337-8), sec. 2 (a) of the 1916 act was amended by being repeated without the proviso (p. 329), while the proviso was inserted as a new section—31 (a)—and to it was added a subsection (b), as follows:

"(b) Any distribution made to the shareholders or members of a corporation . . . in the year nineteen hundred and seventeen, or subsequent tax years, shall be deemed to have been made from the most recently accumulated undivided profits or surplus, and shall constitute a part of the annual income of the distributee for the year in which received, and shall be taxed to the distributee at the rates prescribed by law for the years in which such profits or surplus were accumulated by the corporation, . . . but *nothing herein shall be construed as taxing any earnings or profits accrued prior to March first, nineteen hundred and thirteen,* but such earnings or profits may be distributed in stock dividends or otherwise, exempt from the tax, after the distribution of earnings and profits accrued since March first, nineteen hundred and thirteen, has been made. This subdivision shall not apply to any distribution made prior to August sixth, nineteen hundred and seventeen, out of earnings or profits accrued prior to March first, nineteen hundred and thirteen."

the act of 1916, which it is contended indicates that the new definition of the term "dividends" was intended to be declaratory of the meaning of the term as used in the 1913 act. We cannot accept this suggestion, deeming it more reasonable to regard the change as a concession to the equity of stockholders granted in the 1916 act, in view of constitutional questions that had been raised in this case, in the companion case of *Lynch, collector, vs. Turrish,* and perhaps in other cases. These two cases were commenced in October, 1915, and decisions adverse to the tax were rendered in the district court in January, 1916, and in the circuit court of appeals September 4, 1916.

We repeat that under the 1913 act dividends declared and paid in the ordinary course by a corporation to its stockholders after March 1, 1913, whether from current earnings or from a surplus accumulated prior to that date, were taxable as income to the stockholder.

We do not overlook the fact that every dividend distribution diminishes by just so much the assets of the corporation, and in a theoretical sense reduces the intrinsic value of the stock. But, at the same time, it demonstrates the capacity of the corporation to pay dividends, holds out a promise of further dividends in the future, and quite probably increases the market value of the shares. In our opinion, congress laid hold of dividends paid in the ordinary course as de facto income of the stockholder, without regard to the ultimate effect upon the corporation resulting from their payment.

Of course, we are dealing here with the ordinary stockholder receiving dividends declared in the ordinary way of business. *Lynch, collector, vs. Turrish* and *Southern Pacific Co. vs. Lowe, collector,* this day decided, rest upon their special facts and are plainly distinguishable.

It results from what we have said that it was erroneous to award a return of the tax collected from the respondent, and that the judgment should be

Reversed, and the cause remanded to the district court for further proceedings in conformity with this opinion.

(T. D. 2732, June 11, 1918)

Income tax act of October 3, 1913—Decision of the supreme court

1. Taxable income.
   A dividend declared and paid by a going corporation, partly in cash and partly in assets of the corporation, is subject to the additional tax imposed by the act of October 3, 1913, when received by an individual stockholder, although declared from a surplus which was in part accumulated before March 1, 1913.—*Southern Pacific Co. vs. Lowe, collector,* decided by the supreme court the same day, distinguished.
2. Rights of stockholders before dividends declared.
   An ordinary stockholder, before the declaration of a dividend, has only the right to have the assets of the corporation devoted to its proper business, and to receive such dividends as the directors may in their discretion declare—a very different interest from his interest after a dividend is declared.—*Lynch, collector, vs. Hornby,* decided by the supreme court the same day, is controlling.
3. Meaning of "stock dividend."
   A dividend declared and paid by one corporation in the stock of another is not a "stock dividend" within the accepted meaning of that term.
4. Judgment affirmed.
   The judgment of the district court is affirmed.

The appended decision of the United States supreme court in the case of *Charles A. Peabody vs. Mark Eisner,* as collector of internal revenue, is published for the information of internal-revenue officers and others concerned.

SUPREME COURT OF THE UNITED STATES. No. 705. OCTOBER TERM, 1917

Charles A. Peabody, plaintiff in error, vs. Mark Eisner, collector of internal revenue

In error to the district court of the United States for the southern district of New York

[June 3, 1918]

Mr. Justice Pitney delivered the opinion of the court:

This case arose under the federal income-tax act of October 3, 1913 (ch. 16, 38 Stat., 114, 166). The controversy is over the first cause of action set up by plaintiff in error in a suit against the collector for the recovery of an additional tax exacted in respect of a certain dividend received by plaintiff in the year 1914, the facts being as follows: On and prior to March 1, 1913, and thenceforward until payment of the dividend in question, petitioner was owner of 1,100 shares (out of a total of 2,000,000 shares outstanding) of common stock of the Union Pacific Railroad Co., of the par value of $100 each, and during the same period the company had large holdings of the common and preferred stocks of the Baltimore & Ohio Railroad Co. On March 2, 1914, the Union Pacific declared and paid an extra dividend upon each share of its common stock, amounting to $3 in cash, $12 in par value of preferred stock of the Baltimore & Ohio, and $22.50 in par value of the common stock of the same company; the result being that petitioner received as his dividend upon his holding of Union Pacific common stock $3,300 in cash, 132 shares of Baltimore & Ohio preferred and 247½ shares of Baltimore & Ohio common stock. In his income return for 1914 he included as taxable income $4.12 per share of this dividend, or $4,532 in all, and paid his tax upon the basis of this return. Afterwards he was subjected to an additional assessment upon a valuation of the balance of his dividend, and this, having been paid under protest, is the subject of the present suit, the theory of which is that the entire earnings, income, gains, and profits from all sources realized by the Union Pacific Railroad Co. from March 1, 1913, to March 2, 1914, remaining after the payment of prior charges, did not exceed $4.12 per share of the Union Pacific common stock, and that the cash and Baltimore & Ohio stock disposed of in the extra dividend (so far as they exceeded the value of $4.12 per share of Union Pacific) did not constitute a gain, profit, or income of the Union Pacific, and therefore did not constitute a gain, profit, or income of the plaintiff arising or accruing either in or for the year 1914 or for any period subsequent to March 1, 1913, the date when the income-tax law took effect. The district court overruled this contention upon the authority of *Southern Pacific Co. vs. Lowe, collector* (238 Fed., 847), and *Towne vs. Eisner, collector* (242 Fed., 702). The latter case has since been reversed (245 U. S., 418), but only upon the ground that it related to a stock dividend which in fact took nothing from the property of the corporation and added nothing to the interest of the shareholder, but merely changed the evidence which represented that interest. *Southern Pacific Co. vs. Lowe,* collector, has been reversed this day, but only upon the ground that the Central Pacific Railway Co., which paid the dividend, and the Southern Pacific Co., which received it, were in substance identical corporations because of the complete ownership and control which the latter possessed over the former as stockholder and in other capacities, so that while the two companies were separate and legal entities, yet in fact and for all practical purposes the former was but a part of the latter, acting merely as its agent and subject in all things to its direction and control; and for the further reason that the funds represented by the dividend were in the actual possession and control of the Southern Pacific Co. as well before as after the declaration of the dividend. In this case the plaintiff in error stands in the position

of the ordinary stockholder, whose interest in the accumulated earnings and surplus of the company are not the same before as after the declaration of a dividend, his right being merely to have the assets devoted to the proper business of the corporation and to receive from the current earnings or accumulated surplus such dividends as the directors in their discretion may declare, and without right or power on his part to control that discretion.

It hardly is necessary to say that this case is not ruled by our decision in *Towne vs. Eisner*, since the dividend of Baltimore & Ohio shares was not a stock dividend but a distribution in specie of a portion of the assets of the Union Pacific, and is to be governed for all present purposes by the same rule applicable to the distribution of a like value in money. It is controlled by *Lynch, collector, vs. Hornby*, this day decided.

Judgment affirmed.

(T. D. 2733, June 17, 1918.)

Income and excess-profits taxes.

Form for instruments required under T. D. 2706

The following form is prescribed to facilitate compliance with T. D. 2706 regarding the establishment of a replacement fund in the case of property requisitioned for war uses or lost or destroyed in whole or in part through war hazards:

Form 1114 U. S. Internal Revenue

Income and excess-profit taxes.

APPLICATION UNDER T. D. 2706 FOR PERMISSION TO ESTABLISH A REPLACEMENT FUND.

To the Commissioner of Internal Revenue:

(1) The undersigned (individual) (partnership) (corporation) represents that as a result of suit or otherwise he has secured payment by way of damages of compensation for property title to which has been requisitioned for war uses, or property which has been lost or destroyed in whole or in part through war hazards, to an amount in excess of the value of the property on March 1, 1913, or of its cost if acquired after that date, and that he desires and intends to use the entire sum received as compensation for the replacement in kind of the lost or damaged property.

(2) It being impracticable owing to war conditions to make such replacement for a considerable time, the undersigned hereby makes application for permission to establish a replacement fund in which the entire amount of the compensation so received will be held (unless the property requisitioned, lost, or damaged constituted all or part of the security under a mortgage or trust indenture, in which event the amount carried to the replacement fund will, subject to the approval of the commissioner of Internal Revenue, be the amount of compensation received, less the amount, if any, which becomes payable out of such compensation under the terms of such instrument or the obligations thereby secured).

(3) Attached hereto as schedule A and made a part hereof is a statement reciting all the facts relating to the transaction, including the nature of the property, the character and extent of the loss, the manner and date of securing compensation, the date of acquisition of the property and its cost or fair value on March 1, 1913, the amount of compensation, the amount necessary to make the damage good, a description of the replacement intended and the steps already taken to that end, the probable date of completion, the estimated additional excess profits and income taxes assessable upon the income carried to the replacement fund, and all other matter which might affect a determination.

(4) The undersigned (a) has executed and will cause to be executed by a surety company in good standing the bond hereto annexed as schedule B

in an amount not less than the estimated additional excess profits and income taxes assessable by the United States upon the income carried to the replacement fund, or (b) has executed the agreement hereto annexed as schedule C and will deposit as security for such estimated additional amount of tax obligations of the United States issued after September 1, 1917, to at least an equal amount, to be held in trust as such security in a bank or trust company approved by the commissioner of internal revenue.

(5) The undersigned undertakes that he will proceed as expeditiously as possible to replace or restore such property, and covenants that when the replacement or restoration is made, the new or restored property will not be valued in his accounts at an amount in excess of that at which the requisitioned, damaged, or destroyed property was carried, except and to the extent that such new or restored property has an increased productive capacity.

In witness whereof the undersigned individual has hereunto set his hand and seal, or the undersigned partnership has executed this instrument under the hand and seal of one of its members, or the undersigned corporation has caused these presents to be subscribed by one of its officers and its corporate seal to be hereunto affixed, all the......day of............, 19...., in triplicate.

..............................[L. S.]

..............................[L. S.]

STATE OF ——, *County of* ——, *ss:*

—— ——, being duly sworn, deposes and says that he is the individual applicant above named, or is a member of the partnership above named, or is an officer of the corporation above named, and that the statements made in the foregoing application are true to the best of deponent's knowledge, information, and belief.

....

Subscribed and sworn to before me ——.

....

....

SCHEDULE A.

STATEMENT OF FACTS

Name of applicant ....
Address ....
Business ....
Nature of property involved..
How requisitioned, lost, or destroyed..
How compensation secured..
Date of receipt of payment..
Date of acquisition of property..
Cost (or fair value on Mar. 1, 1913).......................... $.....
Amount of compensation .... $.....
Excess over cost or value on March 1, 1913.......................... $.....
Amount necessary to make damage good.......................... $.....
Nature of replacement intended..
Steps already taken..
Probable date of completion of replacement..
Amount deductible from replacement fund pursuant to any mortgage. $.....
Estimated additional excess-profits tax.......................... $.....
Estimated additional income tax.......................... $.....
Surety on bond or bank for deposit of securities..

Schedule B.

BOND.

Know all men by these presents that ...., as principal, and ...., as surety, are held and firmly bound unto the United States of America in the sum of................dollars, lawful money of the United States, for the payment whereof we bind ourselves. our heirs, executors, administrators, successors, and assigns, jointly and severally firmly by these presents.

Whereas the above-bounden principal has made application to the commissioner of internal revenue for permission to establish a replacement fund pursuant to T. D. 2706 of April 25, 1918, and it appears that the amount of this bond is not less than the estimated additional excess profits and income taxes assessable by the United States upon the income to be carried to the replacement fund:

Now, therefore, the condition of the foregoing obligation is such that if the principal shall either dispose of said replacement fund as specified in said application and complete said replacement on or before the final date set in the permit granted by the commissioner of internal revenue, or account for and pay the additional excess profits and income taxes assessable upon the income so carried to the replacement fund at the rate of tax in force at the time of the original receipt of such income, and shall otherwise well and truly perform and observe all the covenants and conditions contained in the instruments annexed hereto and all the provisions of law and the regulations, then this obligation is to be void, but otherwise to remain in full force and virtue.

Witness our hands and seals in triplicate this....day of........, 19.....

Signed, sealed, and delivered in the presence of—

.... [L. S.]
.... [L. S.]
Principal.

.... [L. S.]
.... [L. S.]
Surety.

Bond approved this....day of........, 19.....

....
Commissioner of Internal Revenue.

Schedule C.

DEPOSIT AGREEMENT

An agreement between................, of..................., party of the first part, and ...., a corporation of the state of ...., party of the second part.

Whereas the party of the first part has made application to the commissioner of internal revenue for permission to establish a replacement fund under T. D. 2706 of April 25, 1918, in accordance with the instruments hereto annexed, and has elected in lieu of a bond to deposit as security for the estimated additional excess profits and income taxes assessable by the United States upon the income to be carried to the replacement fund obligations of the United States issued after September 1, 1917.

Now, therefore, in consideration of a valuable consideration to each of the parties hereto in hand paid by the other, the receipt whereof is hereby acknowledged, it is covenanted and agreed as follows:

(1) The party of the first part has deposited with the party of the second part obligations of the United States issued after September 1, 1917, for a principal amount not less than the estimated taxes aforesaid, in bearer form or with transfer power attached, described as follows:

No.	Name	Denomination	Total
......	....	....	....
......	....	....	....
......	....	....	....
......	....	....	....
	Aggregate total..............	....	....

(2) Such obligations are to be held in trust by the party of the second part as security for the payment of the additional excess profits and income taxes assessable by the United States upon the income carried to said replacement fund at the rate of tax in force at the time of the original receipt of such income, provided the party of the first part shall not dispose of said replacement fund as specified in said application and complete said replacement on or before the final date set in the permit hereto annexed granted by the commissioner of internal revenue.

(3) If on or before the date set in said permit said replacement shall be completed, as evidenced by an acknowledgment in writing to such effect signed by the commissioner of internal revenue, the party of the second part shall thereupon surrender said obligations to the party of the first part or upon his order, and the receipt therefor of the party of the first part shall constitute full satisfaction and discharge of any liability of the party of the second part hereunder. The commissioner of internal revenue may similarly at any time and from time to time authorize the surrender of such portion of said obligations as in his judgment the progress of said replacement shall justify.

(4) If on the date set in said permit the party of the second part shall not have received such final written acknowledgment from the commissioner of internal revenue, it shall hold and deliver said obligations, or the remainder of them, in all respects subject to the order of the commissioner of internal revenue, and at his direction shall proceed to sell said obligations at public or private sale, with or without notice thereof, and shall apply the proceeds thereof to the payment of said taxes and any other taxes due from the party of the first part, and interest, penalties, and expenses of the sale, paying the residue, if any, to the party of the first part. After said date the receipt of the commissioner of internal revenue shall constitute full satisfaction and discharge of any liability of the party of the second part hereunder.

(5) The party of the second part accepts the trust hereunder and acknowledges the receipt and deposit of said obligations.

Witness our hands and seals in triplicate this....day of........, 19.....

.................................[L. S.]
.................................[L. S.]
.................................[L. S.]
.................................[L. S.]

Signed, sealed, and delivered in the presence of—

....
....

Agreement approved this....day of........, 19.....

....
Commissioner of Internal Revenue.

PERMIT TO ESTABLISH REPLACEMENT FUND

TREASURY DEPARTMENT,
OFFICE OF COMMISSIONER OF INTERNAL REVENUE,
Washington, D. C., ..., 19...

Upon the application and schedules hereto annexed the commissioner of internal revenue hereby grants permission to establish a replacement fund pursuant thereto, and directs that pending the disposition of the amount held therein the accounting for gain or loss thereupon may be deferred for the period of time ending ————, 19—, or such further date as he may determine to be reasonable and indorse hereupon. This permit, however, is expressly conditioned upon the applicant forthwith furnishing a bond in the prescribed form approved by the commissioner of internal revenue, or executing an agreement in the prescribed form and depositing subject thereto obligations of the United States issued after September 1, 1917, in an amount and in a bank or trust company approved by the commissioner of internal revenue.

....
Commissioner of Internal Revenue.

INSTRUCTIONS

(1) The applicant should execute the form of application in triplicate and fill out Schedule A. He should also attach to Schedule A a statement of any other special features of the situation which might help the commissioner in arriving at a decision.

(2) The applicant should execute the bond (schedule B) or the deposit agreement (schedule C) in triplicate, inserting the amount and indicating the surety or bank proposed.

(3) The applicant should then forward all three copies of the form to the commissioner of internal revenue, who will consider the application and if he grants it will sign the permit and return the form to the applicant.

(4) The applicant should then forthwith procure the completion of the bond or deposit agreement in triplicate and submit it for approval by the commissioner, which must be given before the permit will become effective.

(T. D. 2734, June 17, 1918.)

Income tax.

Determination of the amount of gain or loss on a sale of stock received as a stock dividend.—Revision of paragraphs 28 and 60 of the income-tax regulations.

By sections 2 (a) and 31 (a) of the income-tax act of September 8, 1916, as amended, taxable income includes stock dividends paid by a corporation in 1916 or subsequent years out of its earnings or profits accrued since March 1, 1913, to the amount of the earnings or profits so distributed, and excludes stock dividends paid in 1916 or subsequent years out of surplus other than earnings or profits accrued since March 1, 1913. In *Towne vs. Eisner* (245 U. S., 418), stock dividends paid in 1913, 1914, or 1915 out of surplus, however created, were held not to be taxable income under the income-tax act of October 3, 1913.

Section 31 (b) of the act of September 8, 1916, as amended, article 107 of the income-tax regulations, and T. D. 2659 of February 28, 1918, and T. D. 2678 of March 23, 1918, provide the method of determining out of what earnings or profits a dividend declared in 1917 or subsequent years is deemed to have been paid.

For the purpose of ascertaining under the income-tax act the gain or loss derived from the sale of stock or other property, its cost, or if acquired before March 1, 1913, its fair market price or value as of March 1, 1913, is evidently the basis to be sought. Such basis once found, the problem is resolved into a matter of subtraction. To avoid unnecessary

complication "cost" is used herein to include also, where required, "fair market price or value as of March 1, 1913."

For the purpose, then, of ascertaining the gain or loss derived from the sale of stock of a corporation received as a dividend, or from the sale of the stock in respect of which such dividend was paid, the cost of such stock is to be determined in accordance with the following rules:

(1) In the case of stock (a) received as a dividend in 1913, 1914, or 1915 out of surplus however created, or (b) received as a dividend in 1916 or subsequent years out of surplus other than earnings or profits accrued since March 1, 1913, the cost of each share of new stock is the quotient of the cost of the old stock divided by the number of old and new shares added together.

(2) In the case of the stock in respect of which any stock dividend was paid as described under (1), the cost of each share of old stock is similarly the quotient of the cost of the old stock divided by the number of old and new shares.

(3) In the case of stock received as a dividend in 1916 or subsequent years out of surplus earnings or profits accrued since March 1, 1913, the cost of each share is the valuation at which it was returnable as income, as shown by the transfer of surplus to capital account on the books of the corporation, usually its par value.

(4) In the case of the stock in respect of which any stock dividend was paid as described under (3), the cost of each share is its original cost, regardless of any stock dividend.

Paragraph 28 of regulations No. 33, revised, is hereby amended to read as follows:

Stock dividends.—Stock dividends declared from earnings or profits accrued prior to March 1, 1913, or from surplus created by the revaluation of capital assets or by placing a value upon trade-marks, goodwill, etc., do not represent a distribution of earnings or profits subject to tax as a dividend in the hands of the recipient shareholder. When stock received in payment of such dividend, or stock in respect of which any such dividend was paid, is sold, the cost of each share of stock, whether old or new, for the purpose of ascertaining the gain or loss resulting from its sale, is the quotient of the cost of the old stock, if acquired on or after March 1, 1913, or its fair market price or value as of that date if acquired prior thereto, divided by the number of old and new shares added together. The profit so ascertained from the sale of such stock is income subject to both normal and additional tax and shall be accounted for in the shareholder's return rendered for the year in which the sale is made.

Paragraph 60 of regulations No. 33, revised, is hereby, amended to read as follows:

Profit from the sale of stock.—When stock is sold from lots purchased at different times and at different prices and the identity of the lots can not be determined as to the dates of purchase, the stock sold shall be charged against the earliest purchases of such stock. The excess of the amount realized on the sale over the cost of the stock, or its fair market price or value as of March 1, 1913, if purchased before that date, will be the profit to be accounted for as income. In the case of stock received as a stock dividend out of surplus other than earnings or profits accrued since March 1, 1913, or of stock in respect of which any such dividend was paid, the cost of each share of such stock shall be ascertained as specified in paragraph 28 hereof.

(T. D. 2736, June 18, 1918.)

Income tax.

Tax on undistributed net income of corporations, joint-stock companies and associations, and insurance companies.

(1) *Statute.*—Section 10 (b) added to title I of the revenue act of September 8, 1916, by section 1206 of title XII of the war-revenue act of October 3, 1917, is as follows:

In addition to the income tax imposed by subdivision (a) of this section there shall be levied, assessed, collected, and paid annually an additional tax of ten per centum upon the amount remaining undistributed six months after the end of each calendar year or fiscal year, of the total net income of every corporation, joint-stock company or association, or insurance company, received during the year, as determined for the purposes of the tax imposed by such subdivision (a), but not including the amount of any income taxes paid by it within the year imposed by the authority of the United States.

The tax imposed by this subdivision shall not apply to that portion of such undistributed net income which is actually invested and employed in the business or is retained for employment in the reasonable requirements of the business or is invested in obligations of the United States issued after September first, nineteen hundred and seventeen: *Provided,* That if the Secretary of the Treasury ascertains and finds that any portion of such amount so retained at any time for employment in the business is not so employed or is not reasonably required in the business a tax of fifteen per centum shall be levied, assessed, collected, and paid thereon.

The foregoing tax rates shall apply to the undistributed net income received by every taxable corporation, joint-stock company or association, or insurance company in the calendar year nineteen hundred and seventeen and in each year thereafter, except that if it has fixed its own fiscal year under the provisions of existing law, the foregoing rates shall apply to the proportion of the taxable undistributed net income returned for the fiscal year ending prior to December thirty-first, nineteen hundred and seventeen, which the period between January first, nineteen hundred and seventeen, and the end of such fiscal year bears to the whole of such fiscal year.

(2) *Definitions—Corporation.*—The term "corporation" or "corporations" as used in this treasury decision shall be construed to include all corporations, joint-stock companies and associations, and insurance companies coming within the terms of title I of the act of September 8, 1916, as amended by title XII of the act of October 3, 1917.

Taxable year.—The term "taxable year" as used in this treasury decision contemplates the calendar year 1917 and each calendar year thereafter, or in the case of a corporation properly filing its income returns upon the basis of a fiscal year other than the calendar year, the fiscal year ending in 1917 and each fiscal year thereafter.

(3) *Corporations subject to tax.*—Every corporation, domestic or foreign, which was subject to taxation upon the total net income received by it during the preceding taxable year, is subject to the provisions of section 10 (b) added to the act of September 8, 1916, by section 1206 of the act of October 3, 1917, which impose a tax upon undistributed net income. Corporations which are exempt under the provisions of section 11 (a) of the act of September 8, 1916, from tax upon total net income are not taxable upon undistributed net income under said section 10 (b).

(4) *Returns.*—Every corporation which is required by the provisions of the act of September 8, 1916, as amended by the act of October 3, 1917, to make a return of its annual net income, and which had a taxable net income for the preceding taxable year, shall make a return of the amount of such net income received during such taxable year remaining undistributed six months after the end of such taxable year. The return shall be made upon Form 1112, shall be sworn to by the president, vice president, or other principal officer, and by the treasurer or assistant treasurer of the corporation and shall be made to the collector of internal revenue of the district in which its return of annual net income is required to be filed. Such return shall be made within sixty days after the expiration of six months after the end of such taxable year, except that any corporation which would otherwise be required to make a return on or

before a date earlier than August 1, 1918, may make such return on or before August 1, 1918.

(5) *Rate of tax.*—Taxes are imposed by section 10 (b) of the act of September 8, 1916, as amended, at two different rates, 10 per cent and 15 per cent.

(6) *Income subject to the* 10 *per cent tax.*—The amount of income subject to the 10 per cent tax is to be ascertained in the following manner:

From the total net income received by a corporation during its taxable year as determined for the purposes of the annual tax imposed thereon by subdivision (a) of section 10 of the act of September 8, 1916, as amended, which remains undistributed six months after the end of such taxable year, are to be deducted (1) the amount of any income taxes imposed by the authority of the United States paid by the corporation within such taxable year from income of that year, (2) such part of the undistributed income as is actually invested and employed in the business, or (3) is retained for employment in the reasonable requirements of the business, or (4) is invested in obligations of the United States issued after September 1, 1917. If the taxable year began on or after January 1, 1917, the remainder is the amount upon which the tax is assessed. If the taxable year began before January 1, 1917, the proportion of such remainder which the period between January 1, 1917, and the end of such taxable year bears to the whole of such taxable year is the amount upon which the tax is assessed. Income received by a corporation before the beginning of a taxable year ending in 1917 is not subject to the tax even though remaining undistributed six months after the end of such taxable year.

(7) *Time of determining amount of undistributed income subject to* 10 *per cent tax.*—The amount of undistributed net income subject to 10 per cent tax is to be determined as of a date six months after the end of the taxable year. Changes in the amount of such undistributed income after such date do not change the amount subject to 10 per cent tax. The commissioner of internal revenue has no authority to change the date as of which the amount of undistributed net income subject to 10 per cent tax is determined, either in the case of a taxable year ending before October 3, 1917, or of any other taxable year.

(8) *Undistributed income.*—The net income received by a corporation during its taxable year remains undistributed until it is distributed in the form of dividends, whether it is represented by liquid assets or otherwise. Income distributed in the form of dividends is subject to the provisions of section 31 (b) added to the act of September 8, 1916, by section 1211 of the act of October 3, 1917, which provides in part as follows:

Any distribution made to the shareholders or members of a corporation, joint-stock company or association, or insurance company, in the year nineteen hundred and seventeen, or subsequent tax years, shall be deemed to have been made from the most recently accumulated undivided profits or surplus. * * *

The burden is upon the corporation seeking to establish a distribution in the current year of profits of the preceding taxable year to show that all the earnings of the current year have been first distributed. In determining the source of earnings from which a particular distribution is made a corporation is, however, permitted to treat the undivided profits and surplus of the current year as reduced by payments for income and excess-profits taxes, or if keeping its accounts on an accrual basis by proper reserves for such taxes, although such payments or reserves are not deductible in computing the income of the corporation for income and excess-profits taxes. (T. D. 2700. See also T. D. 2659 and T. D. 2678.)

(9) *"The business" of a corporation.*—"The business" of a corporation is not limited to the business which the corporation has previously carried on, but includes any line of business which the corporation may legitimately undertake.

When one corporation owns the stock of another corporation in the same or a related line of business and in effect operates the other corporation, the business of the other corporation falling within the general scope of the powers of the first, that business may be in effect although not in legal form the business of the first corporation. Income of the first corporation may be put into the second through the purchase of stock or otherwise, and might, if the subsidiary relationship is established, constitute employment of the income in its own business. For such employment to fall within the exception it would be essential for the corporation to show the same facts with reference to the actual utilization of the funds so employed, or their retention for its reasonable requirements which it would be necessary for the corporation to show with reference to funds employed or retained directly by it.

Investment by a corporation of income in securities of another corporation is not, without more, to be regarded as employment of the income in "the business." The business of one corporation may not be regarded as including the business of another, within the meaning of that exception, unless the other corporation is a mere instrumentality of the first; to establish this it is ordinarily essential that the first corporation own all of the stock of the second.

(10) *Undistributed income "actually invested and employed in the business."*—The portion of undistributed net income which is "actually invested and employed in the business" is not subject to the 10 per cent tax. No attempt is here made to enumerate all the ways in which such undistributed income may be so invested and employed. Undistributed income is used or employed in the business if invested in increased inventories or additions to plant reasonably required by the business; if used for the payment of income and excess-profits taxes for the taxable year, provided the amounts so paid are designated upon the books of the corporation as made from the income of such taxable year; if used to make good an impairment of capital when such income is by law required to be so used; or if used to retire the whole or any part of the capital stock of the corporation, but reserves set up for this purpose are neither invested and employed in the business, nor retained for employment in the reasonable requirements of the business. In the case of a banking institution the business of which is to receive and loan money, using capital, surplus, and deposits for this purpose, undistributed income actually represented by loans is invested and employed in the business.

(11) *Undistributed income "retained for employment in the reasonable requirements of the business."*—The portion of undistributed net income which is "retained for employment in the reasonable requirements of the business" is not subject to the 10 per cent tax. No attempt is here made to enumerate all the ways in which such undistributed income may be retained. Undistributed income is retained for employment in the reasonable requirements of the business if to a reasonable amount it is retained to make good an impairment of capital when such income is by law required to be so used; or in accordance with contract requirements placed to the credit of a sinking fund for the purpose of retiring bonds issued by the corporation; or retained for working capital required by the business. In the case of a banking institution, the business of which is to receive and loan money, using capital, surplus, and deposits for this purpose, such reasonable amounts of undistributed net income as are retained for future loans are not subject to the 10 per cent tax.

(12) *Undistributed income "invested in obligations of the United States issued after September first, nineteen hundred and seventeen."*—Undistributed net income "invested in obligations of the United States issued after September first, nineteen hundred and seventeen" is not subject to the 10 per cent tax. This is not true of obligations of the United States issued before September 1, 1917.

The restrictions as to the distribution of earnings of previous taxable years resulting from the presumption that all current distributions are from current earnings do not apply to the use of earnings for investments by corporations. There is in the statutes no limitation or restriction as to the source from which may be taken earnings used for this purpose. Amounts invested in obligations of the United States issued after September 1, 1917, may thus be treated as made from such earnings as the corporation may designate. (T. D. 2700.)

(13) *Income subject to* 15 *per cent tax.*—If the secretary of the treasury ascertains and finds that any portion of the undistributed net income retained at any time for employment in the business is not so employed, or is not reasonably required in the business, it is subject to a tax of 15 per cent. The liability of undistributed net income to the 10 per cent tax depends upon the manner in which it is invested on the date six months after the end of the taxable year. However, the status of the income is not lost by the investment, but persists for the possible application of the 15 per cent tax. Amounts of undistributed net income not subject to the 10 per cent tax because of employment in the business, retention for such employment or investment in certain obligations of the United States, become subject to the 15 per cent tax if retained after such investment, employment, or retention for employment in the reasonable requirements of the business has ceased.

(14) *Penalty for nonpayment.*—If the tax assessed on undistributed net income is not paid within 10 days after the date of notice and demand therefor it shall be the duty of the collector to collect said tax with a penalty of 5 per cent additional upon the amount thereof and interest at the rate of 1 per cent a month.

(15) *Other penalties.*—In case of any failure to make and file a return within the time prescribed by law 50 per cent of the amount of the tax shall be added thereto, except that when a return is voluntarily and without notice from the collector filed after such time, and it is shown that the failure to file it was due to reasonable cause and not a wilful neglect no such addition shall be made to the tax. In case a false or fraudulent return is wilfully made 100 per cent of the amount of the tax shall be added thereto. Corporations, officers thereof, and other individuals required to make, render, sign, or verify returns of corporations shall be subject to the specific penalties provided by law for refusal or neglect to make such returns and for making false or fraudulent returns.

(16) *Extension of regulations No.* 33, *revised.*—Regulations No. 33, revised, dated January 2, 1918, and all subsequent treasury decisions so far as they are applicable to the taxes imposed by subdivision (b) added to section 10 of the act of September 8, 1916, by section 1206 of the act of October 3, 1917, are hereby extended and made a part of this treasury decision in so far as they do not conflict with the rulings contained herein. Article 238 of said regulations No. 33, revised, is hereby revoked.

(T. D. 2737, June 19, 1918.)

Income tax.

Co-operative merchandizing organizations are subject to the provisions of the act of September 8, 1916, as amended by the act of October 3, 1917. Periodical refunds made to purchasers are to be regarded as discounts, reducing the organization's net income. The recipient need not return them as income, but should treat sums so received as rebates, reducing the cost to him of the purchases on which the refund is based.

Co-operative societies, associations, or corporations which make a periodical refund—sometimes called a dividend—to members or to prospective members or to patrons generally, in proportion to the purchases made by the recipient, are not within any of the exceptions or exemptions of the act of September 8, 1916, as amended by the act of October 3, 1917, and are subject to its provisions.

Where such refund payments are made in accordance with by-laws or published rules regularly adhered to, they are to be regarded as discounts or rebates, tending to reduce the taxable net income of the organization. Like discounts generally, they should appear as an added item of cost in the detailed schedule of cost items submitted with the organization's return of income.

This ruling is in accordance with settled practice in the administration of the income-tax laws, adopted because the real purpose of such organizations is to furnish goods at cost.

So-called "dividends" of this character are wholly different from ordinary dividends based on stock holdings, and they need not be listed as income by the recipient. However, if the recipient is claiming the right to deduct as business expenses any expenditure on which the refund is based in whole or in part the sum claimed as a deduction must be reduced in proportion to the refund received.

(T. D. 2740, June 24, 1918.)

Corporation excise tax and income taxes.

Digest of recent decisions of the Supreme Court of the United States.

The following propositions of law, stated for the information and guidance of internal-revenue officers and others concerned, are expressed or implied in the recent decisions of the supreme court of the United States in *United States v. Biwabik Mining Co.* (T. D. 2721), *Goldfield Consolidated Mines Co. v. Scott* (T. D. 2722), *Doyle v. Mitchell Bros. Co.*, (T. D. 2723), *Hays v. Gauley Mountain Coal Co.* (T. D. 2724), *United States v. Cleveland, Cincinnati, Chicago & St. Louis Railway Co.* (T. D. 2725), *William E. Peck & Co. (Inc.) v. Lowe* (T. D. 2726) *Lynch v. Turrish* (T. D. 2729), *Southern Pacific Co. v. Lowe* (T. D. 2730), *Lynch v. Hornbv* (T. D. 2731), and *Peabody v. Eisner* (T. D. 2732):

(1) In the determination of net income the excise-tax act of August 5, 1909, permitted the deduction from gross income of "a reasonable allowance for depreciation of property, if any;" the income-tax act of October 3, 1913, permitted "a reasonable allowance for the exhaustion, wear, and tear of property arising out of its use or employment in the business, not to exceed, in the case of mines, 5 per cent of the gross value at the mine of the output for the year for which the computation is made;" and the income-tax act of September 8, 1916, as amended, permits "in the case of mines a reasonable allowance for depletion thereof not to exceed the market value in the mine of the product thereof which has been mined and sold during the year for which the return and computation are made."

(*a*) As mining leases are not conveyances of the ore in place, but are grants of the privilege of entering upon the premises and mining and removing the ore, under none of the acts of 1909, 1913, or 1916, may a lessee of mining property deduct as so much depletion of capital assets the proportionate value in place on January 1, 1909, or any other date, of each ton of ore mined during the taxable year. See T. D. 1606 (75); article 145 of regulations No. 33; and articles 8, 171, and 172 of regulations No. 33, revised. *United States v. Biwabik Mining Co.* See *Von Baumbach v. Sargent Land Co.* (242 U. S. 503).

(*b*) Under the act of 1909 a mining corporation owning its mine is not entitled to a deduction from its gross income of any amount whatever on account of depletion or exhaustion of the ore bodies caused by its operations for the year for which the tax is assessed, nor to a deduction against the gross proceeds from the mining and treatment of ores to the extent of the cost value of the ore in the ground before it was mined. T. D. 1675 (80-89) and T. D. 1742 (96-105) are modified accordingly. In view of their different provisions this rule is inapplicable to situations arising under the acts of 1913 and 1916. See articles 141 and 142 of regulations No. 33, and articles 8, 171, and 172 of regulations No. 33, revised. *Gold-*

field Consolidated Mines Co. v. Scott. See *Stratton's Independence v. Howbert* (231 U. S., 399); *Stanton v. Baltic Mining Co.* (240 U. S., 103).

(2) The excise-tax act of August 5, 1909, measured the tax by the net income of a corporation "received" by it from all sources during the taxable year; the income-tax act of October 3, 1913, imposed the tax upon the net income "arising or accruing" from all sources during the taxable year; and the income-tax act of September 8, 1916, as amended, upon the net income "received" from all sources during the taxable year.

(*a*) Where property is acquired by a corporation and subsequently sold for a higher price, under all three acts the gain on the sale is income to the corporation. If, however, the property was acquired before January 1, 1909, only such portion of the gain as accrued subsequent to December 31, 1908, was taxable under the act of 1909, and if it was acquired before March 1, 1913, only such portion of the gain as accrued subsequent to February 28, 1913, was taxable under the act of 1913, or is taxable under the act of 1916. See regulations No. 31, T. D. 1606 (40, 50, 76), T. D. 1675 (37, 48, 75), T. D. 1742 (43, 55, 91), and articles 88, 101, and 116 of regulations No. 33, revised. *Doyle v. Mitchell Bros. Co.; Hays v. Gauley Mountain Coal Co.; United States v. Cleveland, Cincinnati, Chicago & St. Louis Railway Co.*

(*b*) In order to determine whether there has been gain or loss on a sale, and the amount of the gain, if any, in general under all three acts, an amount must be withdrawn from the gross proceeds sufficient to restore the cost of the property or the capital value that existed at the commencement of the period under consideration (either Jan. 1, 1909, or Mar. 1, 1913). Interest should not be added to the purchase price in order to ascertain the cost of the property. In apportioning the profits derived from a disposition of property acquired before and sold after January 1, 1909, for the purpose of the act of 1909, or acquired before and sold after March 1, 1913, for the purpose of the act of 1913, the division may be pro rata according to the time elapsed or may be based on an appraisal or inventory taken as of December 31, 1908, or February 28, 1913. This is a matter of detail, to be settled according to the best evidence obtainable and in accordance with valid departmental regulations. For the purpose of the act of 1916, however, the fair market price or value as of March 1, 1913, to be ascertained in any practicable manner, is the statutory basis for determining the amount of gain on a sale of property acquired before that date. See regulations No. 31, T. D. 1578, T. D. 1588, T. D. 1606 (37, 71), T. D. 1675, (36, 55, 69), T. D. 1742 (42, 62, 86), articles 4, 90, 91, 92, 93, 101, 109, 111, 112, and 116 of regulations No. 33, revised, and T. D. 2649. *Doyle v. Mitchell Bros. Co., Hays v. Gauley Mountain Coal Co., United States v. Cleveland, Cincinnati, Chicago & St. Louis Railway Co.*

(*c*) The act of 1913 is valid and constitutional in taxing net income derived from sales in foreign commerce. The same principle applies to the acts of 1909 and 1916. *William E. Peck & Co. (Inc.), v. Lowe.*

(*d*) Where a stockholder in a corporation receives as a liquidation dividend, representing his share in the distribution of the proceeds of the sale of the property of the corporation upon dissolution, a sum greater than the cost of his stock, under the acts of both 1913 and 1916 the gain is income to the stockholder. If, however, he acquired the stock before March 1, 1913, only such portion of the gain as accrued subsequent to February 28, 1913, was taxable under the act of 1913, or is taxable under the act of 1916. Compare the case of a dividend in ordinary course in paragraph (*f*) below. See the citations in paragraphs (*a*) and (*b*) above. *Lynch v. Turrish.*

(*e*) Where a corporation owns all the stock and operates under a lease all the property and business of another corporation, acting as banker for it, and the two corporations being in substance identical and merged for all practical purposes, under the acts of both 1913 and 1916 surplus of the

lessor corporation accrues as income to the lessee corporation as and when accumulated by the lessor corporation, notwithstanding the formal distribution of such surplus in dividends to the lessee corporation may not occur during the taxable year. This special situation forms an exception to the general rule stated in paragraph (*f*) below. See articles 125, 207, and 208 of regulations No. 33, revised. *Southern Pacific Co. v. Lowe.*

(*f*) Where a stockholder of a corporation receives dividends paid in the ordinary course of business, even though extraordinary in amount, under the acts of both 1913 and 1916 such dividends are income in the year in which they are received by the stockholder. If paid out of surplus accrued to the corporation prior to March 1, 1913, they were subject to tax under the act of 1913, although expressly exempt from tax under the act of 1916. A dividend paid by a going corporation out of current earnings or accumulated surplus when declared by the directors in their discretion, being in the nature of a recurrent return upon the stock, is distinguishable from a so-called dividend in liquidation of the entire assets and business of the corporation, which is a return to the stockholder of the value of his stock upon the surrender of his entire interest in the corporation. Compare the case of a liquidation dividend in paragraph (*d*) above. See articles 105, 106, and 107 of regulations No. 33, revised, T. D. 2659, and T. D. 2678. *Lynch v. Hornby* and *Peabody v. Eisner.*

(*g*) A dividend in ordinary course paid on stock of a corporation in property or stock other than its own is income to the stockholders to the amount of its cash value when received under the acts of both 1913 and 1916. A dividend paid in stock of another corporation is not a stock dividend. See articles 4 and 106 of regulations No. 33, revised. *Peabody v. Eisner.* Compare *Towne v. Eisner* (245 U. S., 418).

(T. D. 2744, July 3, 1918)

Income and excess-profits taxes.

Returns made upon the basis of "cost or market value, whichever is lower" to be accepted.—T. D. 2609, as supplemented by T. D. 2649, affirmed.

To collectors of internal revenue, revenue agents, and others concerned:

As question had arisen as to the legality of the authorization by T. D. 2609 of returns for income and excess-profits tax purposes upon the basis of inventories taken "at cost or market value, whichever is lower," the matter was referred to the attorney general. (See T. D. 2649.) The attorney general has advised, upon the basis of a recent decision of the Supreme Court (*Doyle v. Mitchell Bros.*, decided May 20 last), that the methods of taking inventories authorized by T. D. 2609 are permissible. That decision, supplemented by the last paragraph of T. D. 2649, defining "a dealer in securities," therefore, continues to stand as a regulation of the department.

Students' Department

EDITED BY SEYMOUR WALTON, C.P.A.
(ASSISTED BY H. A. FINNEY, C.P.A.)

INSTITUTION EXAMINATION, MAY, 1918

In regard to the following attempt to present the correct solutions to the questions asked in the examination held by the American Institute of Accountants in May, 1918, the reader is cautioned against accepting the solutions as official. They have not been seen by the examiners—still less endorsed by them.

AUDITING

Question 1. What would you consider satisfactory evidence of the correctness and propriety of expenditures of the following classes:

Wages paid
Land purchased
Commission paid to bankers for sale of bonds
Salary of president
Expenses of president
Pensions paid to ex-employes
Directors' remuneration?

Answer to question 1. Wages should be evidenced by payrolls that have been properly approved and bear the written signature of timekeepers certifying to the time put in by each operative, whether the time is taken directly by them or recorded on time-clocks, the superintendent or other officer certifying to the rate of pay, unless the timekeepers are able to do this, a responsible office clerk who certifies to the correctness of the extensions, two similar clerks or cashiers who certify that the correct amount was placed in each envelope, and the foremen of the different departments certifying that the right men received the envelopes.

I do not see that the auditor could pass on the propriety of the wages paid, unless the amount was quite out of proportion to the results obtained in the way of output.

The purchase of land should be authorized by a vote of the directors or stockholders, as shown by the minutes. The amount paid would be shown by the receipt for the money. The evidence of title and the amount of any mortgage given in part payment should be verified from the county records, a mere deed not being sufficient.

Commission paid to bankers for sale of bonds would be evidenced by the receipt given by the bankers.

The salary of the president must be authorized by a vote of the directors recorded on the minutes. This record should be signed by the vice-president, better still by all the directors. The correctness of the actual expenditures will be evidenced by the receipt of the president or the entry crediting his personal account.

Expenses of the president would be evidenced by his own voucher. It is not customary to require detailed expense accounts from high officers of a company.

Pensions paid to ex-employes would be evidenced by their receipts.

Directors' remuneration should be authorized by a vote of the board. The correctness would then be shown by the number of directors present at each meeting as recorded in the minute book.

As in the case of the wages paid, it does not seem part of the duty of an auditor to pass on the propriety of these expenditures as long as there is no reason to suspect fraudulent manipulation. The judgment of the directors is supposed to be final in regard to the value of the land purchased and the necessity of paying a commission for the sale of bonds, and they certainly are the supreme authority for the amount of the president's salary and of the expenses incurred by him, as well as of their own remuneration. Pensions paid to employes would also be authorized by them, unless there existed a regular pension system which would govern them. If the auditor finds the proper authority for these expenditures, his duty is done. He is not supposed to criticize their wisdom, unless specially asked to do so.

Question 2. Give either the classification of notes and accounts receivable suggested in the *Federal Reserve Bulletin* for April, 1917, for use in audited statements for credit purposes, or an alternative classification.

Answer to question 2. The *Federal Reserve Bulletin* for April, 1917, suggests the following classification:

Notes and accounts receivable:		
Notes receivable of customers on hand (not past due)		xx
Notes receivable discounted or sold with indorsement or guaranty		xx
Accounts receivable, customers (not past due)		xx
Notes receivable, customers, past due (cash value $....)		xx
Accounts receivable, customers past due (cash value $....)		xx
		xx
Less provisions for bad debts	xx	
Provisions for discounts, freight, allowances, etc.	xx	xx
Total		xx

The above are given under the title of notes and accounts receivable on the asset side of the balance-sheet. Under the heading of securities on the asset side are listed:

Notes given by officers, stockholders or employes
Accounts due from officers, stockholders or employes

On the liability side under the heading of secured liabilities are given:

Notes receivable discounted or sold with indorsement or guaranty (contra)	xx
Customers accounts discounted or assigned (contra)	xx

Question 3. How is the position of an auditor affected if the system of the concern under audit is defective:

(a) As to internal check
(b) As to cost methods?

Answer to question 3. (a) When the system of internal check is properly elaborated, the auditor can depend on it to a very large extent for the correctness of a considerable portion of the figures he is examining, contenting himself with a few tests sufficient to convince him that the system is being properly carried out. If the system or its application is defective the auditor must be much more particular in obtaining proof of the correctness of the items, such as the record of incoming cash, of returned sales and of allowances. His ingenuity may be taxed to obtain the proper proof, but he can almost always find a way to do it. The relation of different items of cost to output is one of the most important aids. For instance, the virtual doubling of lumber cost to produce in one year practically the same amount of finished goods that was turned out the previous year led to the discovery that, owing to the absence of any check on the receipt of goods into the factory, the lumber buyer and a clerk in a lumber concern had collected for a large amount of lumber that had never been received.

(b) The absence of proper cost methods prevents the auditor from giving anything in the way of comparisons of detailed costs from year to year. The principal effect of inaccurate costs is that the value of goods in process is difficult to fix and consequently the inventory of such goods is usually not much better than an estimate. This will also affect the inventory of finished goods, since their cost is found by deducting the cost of the goods in process from the total manufacturing cost.

Question 4. In the machinery account of a company under audit, you find the following among other items:

Dr.		Cr.	
Purchase of two machines, type A, including freight	$8,000	Sale of old machine, type A (less cost of removal and freight)	$1,264
Cost of removing a disused machine, type B, to make room for new machine	160	Sale of old machine, type B	1,470
Cost of installation of two new machines	280		
Alterations to four type C machines, necessitated by change in product	640		
Cost of moving two machines from building A to building B to permit of more economical operation, including reinstallation	270		

The balance on machinery depreciation account shows an increase for the year of the amount provided out of income, which is computed at the rate of 4 per cent. on the balance of machinery account at the commencement of the year. The method of keeping the machinery and machinery depreciation accounts has been in force from the commencement of operations. Draft your comments as auditor of these accounts, assuming that no items other than those above mentioned call for any comments.

Answer to question 4. The purchase price, the freight, the cost of moving an old machine to make way for a new one and the cost of installing the two new machines are proper charges to machinery account. Alterations to machines made necessary by change in product and the cost

of moving machines to permit of more economical operation are not legitimate charges to the account. As they are intended to benefit the future, it is not necessary to charge them all off as extraneous expenses of the current year. They may be carried as a deferred charge to be charged off in the next few years. They must not be considered manufacturing costs of the current year.

The credits are correct as far as they go. There should, however, be a further credit of whatever proportion of the depreciation reserve is applicable to these particular machines, offset by a debit to depreciation reserve account. The credits should then be brought up to the amount of the original cost of the machines by a charge to surplus. If the credits from cash and reserve total more than the original cost, the adjustment would be made by a credit to surplus.

Unless the machinery is peculiar, 4 per cent. is altogether too small a rate for depreciation, and the auditor should so state in his report.

Question 5. Prepare a programme for an annual audit of the accounts of a trust estate. (It is not necessary to deal with special transactions such as occur in connection with the original creation of a trust).

Answer to question 5. It is first necessary that the auditor should acquaint himself with all the provisions governing the trust, as one of his principal duties is to see that the trustee carries them out.

He should start with the schedule of assets as contained in the original inventory, if this is a first audit, otherwise as shown by the report of the last previous audit. If any of these assets have been disposed of, he should require evidence of the prices obtained, such as statements from reputable brokers. If any new securities have been purchased he should require the same evidence as to prices. In the case of listed securities he should also examine the records in financial papers to see that the prices realized or paid were in accordance with the quotations at the respective dates. If either the deed of trust or the law of the state limits the character of trust investments, he should see that securities bought comply with the requirements. At the end he should verify the existence of the assets by actual inspection of securities and by consulting county records in case any real estate is included. All assets, including the bank account, should be in the name of the trust.

The income of the trust should be verified in detail. The interest bearing securities will themselves disclose the amount of the income that should be received. Dividends on all listed and many unlisted stocks are recorded in financial journals. If not, the information must be obtained by correspondence with the secretaries of the companies. Rentals of real estate are extremely difficult to verify unless all the pieces are rented all the time. Trustees have been known to report property as vacant when they were really receiving rent for it. This could be detected only by judicious inquiry in the neighborhood.

The auditor should require the production of vouchers for all payments. Particular attention should be paid to the amount of commission retained by the trustee and the rate on which it is based, which should, of

course, be that authorized by the deed of trust or the law. If the trust is under the supervision of a court, all expenses and other important transactions should be authorized by it.

If the trust involves a life-tenant and a remainderman, great care must be exercised to keep the income distinct from the principal. Premiums and discounts on securities bought should in such a case be amortized in order to determine the true income.

Question 6. Draft a form of audit certificate to accompany a balance-sheet which is to be published in the annual report of a corporation.

Answer to question 6. A certificate may be very terse, as,

"We have audited the accounts of the Blank Company for the year (or number of years) ending December 31, 1917, and

"We certify that the accompanying balance-sheet is in our opinion a fair and correct statement of the financial condition of the company on December 31, 1917.

"John Doe & Co., C.P.A.,
"Members of the American Institute of Accountants."

Or it may go more into particulars, stating in addition to the above,

"We verified the cash, the inventories of supplies and materials, of partly finished and of finished product and the other current assets. The inventories are priced at cost or market value, whichever is the lower. Guided by the previous history of the business, we are of the opinion that ample reserves have been set up against losses from bad debts.

"All charges to fixed asset accounts were found to represent real additions to the property. The reserves for depreciation are in our opinion ample."

Question 7. State two methods which have been used to conceal thefts of cash and also procedure in an audit which would disclose such irregularities if they should exist.

Answer to question 7. In an actual case there was in use a combined journal-cashbook. Among the debit columns was one for cash received and another for return premiums allowed. It was in a large insurance agency and there was no internal check on return premiums. All the entries in both columns were correct, but each month except the two summer vacation months a single page was under-added several hundred dollars in the cash column and correspondingly over-added in the return premium column. This went on for nine years without being detected, and would probably have continued if there had not been a change of general managers. An audit was then made by accountants who believe in adding every page of a cashbook. As the audit was for only one year and there were only ten pages wrong in the year, it might easily have been possible to miss all the erroneous pages if tests of the addition had been relied upon. Nothing but a thorough addition of all the pages would have discovered the fraud.

In another actual case the bookkeeper of a coal company manipulated the freight account. Coal is sold f.o.b. destination, but the freight is not prepaid. It is paid by the customer and charged to the coal company as part payment for the coal. Instead of crediting the various customers with the freight at once, the bookkeeper allowed two or three months to elapse and then made lump sum entries with no details. Suspecting fraud from the size of the freight account, the auditor calculated the proper freight from the tonnage shown by the sales record and found that the charge to freight was more than $7,500 in excess of the correct amount, the cash receipts being correspondingly diminished by abstraction. Incidentally the auditor ascertained the proper rates of freight for the different customers by an examination of the correspondence with the railroad company in which complaints were made of overcharges and the correct rates were stated. In this way no inquiries were addressed to outside parties which would have aroused suspicions.

Question 8. What is the extent of an auditor's responsibility in respect to the classification of assets and liabilities in a balance-sheet which he certifies?

Answer to question 8. The purpose of a balance-sheet is to exhibit the real financial condition of a business. One of the most important points to be covered is the relation between fixed assets and liabilities and the resultant active capital available for conducting the business. The responsibility of the auditor for the classification of the assets and liabilities arises from the false impression that may be given of the financial condition if wrong classification results in either a better or a worse statement than is correct. For instance, classifying a long time mortgage note for a large amount as a floating or current asset or liability, as the case might be, would result in a statement showing in one case larger quickly available assets and in the other larger immediate liabilities than the facts would justify.

Question 9. Outline the work which should be done in connection with notes and bills payable in an audit for credit purposes of a merchandising company.

Answer to question 9. The detection of notes payable outstanding which have not been entered on the books is one of the most difficult tasks of the auditor. If the notes or accepted bills have been given for open accounts payable, little real harm is done by not recording the transactions, since the form but not the amount of the indebtedness is changed. It is a much more serious matter when large notes made by a corporation are discounted secretly and the proceeds placed to the individual credit of officers of the company as cash deposits by them. Any such large deposits by officers should be inquired into and, as Montgomery says, each officer should be asked "Where did you get it?" If he will not answer, the auditor should call attention in his report to the fact that certain officers have very large credit balances. He should also separate them in the balance-sheet from the ordinary accounts payable and show them specifically as due by officers.

If such unrecorded notes are outstanding their existence may be detected by payments of interest that are not applicable to any recorded notes. But if the payment is made by one of the officers personally and he is reimbursed by a credit for traveling or other special expenses, the auditor would find no record of the interest. If there is no such record nor any other suspicious circumstance, the auditor cannot be blamed if he does not discover the unrecorded notes. He should, however, put the principal officers on record, in writing if possible, to the effect that all liabilities are disclosed.

In his report the auditor should classify the notes outstanding as,

(1) Notes issued for merchandise (or trade acceptances, if any),
(2) Notes held by banks in which accounts are kept,
(3) Notes held by private individual friends,
(4) Notes held by officers and stockholders,
(5) Notes sold through brokers.

It is also advisable to state how many notes are on demand, how many are secured by collateral and how many are unsecured.

Question 10. How would you proceed if the accounts of a corporation which you were auditing were in your judgment incorrect and you were unable to induce the officers to make the changes you deemed imperatively called for

(a) If you had been elected as auditor by stockholders,
(b) If you had been appointed by the directors,
(c) If you had been instructed by the president on the request of the company's bankers or note-brokers?

Answer to question 10. In any event I would make my report in accordance with my view of the facts. As it is not an unheard-of thing to have an auditor's report unbound and one or more pages replaced by others more favorable to the ideas of the officers, I would earmark each page of my report by signing it, unless I used only paper that was watermarked with my name.

(a) If elected by the stockholders, I would send my report to the chairman of the auditing committee, or other proper person, and would notify the rest of the committee or some prominent stockholders that I had done so, and would also inform them that they could see a copy of the complete report at my office. This is because the chairman of the committee may take sides with the officers and may not submit the entire report to the stockholders.

(b) If appointed by the board of directors I would send my report to the chairman of the finance committee and would also notify the other directors that I had done so and that they could see a copy of the report at my office.

(c) I would merely send my report to the president, unless the circumstances were such that the bank or broker could be considered as a co-client, in which case I would send a copy of the report to them.

Bond Discount

Editor, Students' Department:

Would you kindly favor me with advice on the following question:

A trustee purchases $100,000 five-year 4 per cent. bonds for $96,480 to yield 4.80 per cent. At maturity the bonds are paid at their face value. Should the difference between the cost price, i. e., $96,480, and $100,000, the face value, be credited to the principal or income of the estate? Would your answer be any different if this information was to be used for the purpose of an income tax return or a fiduciary accounting?

Yours very truly,
B. F. Hogan.

Brooklyn, New York.

The discount on the bonds is interest received in advance and is all income, but must be spread over the five years—that is, it must be amortized.

As the bonds are to yield 4.80 per cent., the interest must be calculated at that rate on the amount invested. As that will amount to more than the coupon collected, the difference must be added to the carrying value of the bonds to form a new basis for the calculation of interest. The process is as follows, the coupons being, of course, semi-annual.

	Credit interest	Coupon collected	Principal
Cost			96,480.00
96,480 at 2.4%	2,315.52	2,000.00	315.52
New principal			96,795.52
96,795.52 at 2.4%	2,323.09	2,000.00	323.09
New principal			97,118.61

and so on for eight more half-years, when the principal should become $100,000.00. As the additions to the carrying value have been advanced by the principal or corpus of the estate, the whole $100,000.00 would belong to the principal when collected. In the meantime the income would be as shown by the credit to interest.

This is the proper procedure in any circumstances, but I understand that the government claims that the whole discount is earned when the bonds are purchased. It hardly seems possible that such a claim could be enforced.

Depreciation on Circulating Containers

Editor, Students' Department:

What do you consider the correct way to handle depreciation on the following materials used in the milk business—cans, cases and bottles?

A large milk can lasts about ten years as far as the wear and tear goes. A great many of them are lost, being scattered all over the several states where we do business. It is impossible to get even an approximate inventory of the cans on hand. A large number of them are in the hands of the farmers and others are in transit. If I charge the cost to the asset account, crediting depreciation at a certain rate to a reserve account, I

will eventually be charging off depreciation on the cost of cans which have actually been lost and gone out of service.

Cases last approximately five or six years and quite a number of these are also lost among the trade.

Bottles last about fourteen fillings on an average. We can charge off an estimated amount of bottles used, crediting this figure to the asset account, keeping no reserve account.

Is it proper to consider interest on money borrowed to buy cream that is put into storage as part of the cost of the cream, adding it to the inventory cost of the cream, until it comes out of storage and is put into use?

Yours very truly,

Boston, Massachusetts. R. A.

The treatment of the cans would depend on whether or not you are supposed to hold the farmers responsible for the cans furnished to them. If so, the proper way to do is to keep a can account with each farmer, charging him with those sent him and crediting him with those he returns. This account is kept in quantities, not in money, and can be carried in an inside column on the farmer's account.

If the cans are not chargeable to the farmers, you should charge off the usual depreciation, crediting reserve for depreciation, and in addition should charge off an estimated amount lost, crediting the asset account of cans. Unless the business is increasing, the same result would follow if you charge new cans bought to replace those lost to can expense instead of to the asset account. The same thing would apply to cases. The asset account should be valued at whatever the average of cans or cases necessary for the business would be worth according to your best estimate.

The asset account of bottles should be carried at the estimated value of the normal supply necessary to run the business, all new bottles being charged to expense.

Opinions are divided as to the interest on the cream stored. Some things (whiskey, for instance) increase in value by age, but cream does not. Personally, I should consider cost of storage, including interest, a general expense, but you would have good authority for adding it to the inventory value of cream, if you wish to do so.

Discount on Bonds Redeemed with Stock

Editor, Students' Department:

I have just encountered a problem the solution of which is not just clear to me and would like to have you advise me the correct method of handling it. Following are the transactions as they occurred:

On November 1, 1916, a corporation sold its bonds, full issue, at a discount of $162,500, the par value being $1,750,000. On November 1, 1917, they called in and cancelled $50,000 of these bonds, paying par value for them. On the same date they issued preferred stock par value $1,700,000 and exchanged it for the balance of the bonds then outstanding, the par value of the preferred stock issued being the same amount as par value of the bonds that were outstanding and exchanged for the stock.

Will you please advise me how to handle these transactions from beginning to end? The point I am particularly doubtful about is the proper disposition of the discount of the bonds.

Very truly yours,

H. B. L.

When the bonds were sold the entry should have been:

Cash	1,587,500.00	
Discount on bond	162,500.00	
Bonds		1,750,000.00

At the end of the first year there should have been charged to bond interest and credited to discount on bonds an amount determined by the amortization of the discount over the life of the bonds. As you do not give the maturity of the bonds, this amount is not ascertainable. Therefore we must deal only with the $50,000.00 redeemed. As this is 1/35 of the whole issue, that proportion of the discount should be written off, say $4,650.00, reducing the balance of discount on bonds to $157,850.00.

The issue of the preferred stock must be treated as if it had been made originally at a discount of $157,850.00. The fact that the bond transaction intervened does not change the condition, which is that, in the last analysis, the preferred stock was sold at a discount. The entry would be

Discount on preferred stock	157,850.00	
Discount on bonds		157,850.00

As preferred stock does not mature at a given date, no rule can be given for writing off the discount. The question will have to be left to the discretion of the directors.

Selling One Company to Another

Editor, Students' Department:

The O. H. Coal and Land Co., chartered under the laws of the state of Pennsylvania, is now owned by H. R. G., president, who has purchased all the shares of stock of the stockholders, but the old officers and the directors of the company are yet in office. The company has not operated for the past fifteen years. Mr. G. desires to transfer the property to the T. Limestone Company of Pennsylvania, of which he is president and sole owner.

Would you please advise the steps necessary for the T. Limestone Company to get possession of the O. H. Coal and Land Co., and to dissolve the O. H. Coal and Land Company and surrender the charter? Would it be necessary for the old officers and directors of the O. H. Coal and Land Company to hold a meeting regarding the transfer, or could it be transacted without a meeting? Do you consider it a good plan to exchange shares of the T. Limestone Company for the shares of the O. H. Coal and Land Company, and would it be necessary to have a meeting of the officers in order to do this? Your kind attention would greatly oblige,

Yours very truly,

H. T. W.

Kittanning, Pennsylvania.

The T. Company can acquire the property of the O. H. Company by buying all the stock of the latter from Mr. G., paying him an agreed price in cash or in stock of the T. Co.

Or the T. Co. can buy the assets of the O. H. Co., paying as above. O. H. will then take the necessary legal steps to dissolve itself and pay off its sole stockholder by giving him the assets in liquidation of the capital stock.

In one case the O. H. Co. remains in existence with all its stock held by the T. Co.; in the other case O. H. is liquidated and goes out of existence.

All the steps in this latter case must be duly authorized by votes of directors or stockholders in conformity with the laws of the state in which the company is incorporated. It is better to have the advice of a lawyer in regard to these steps.

The sale of the stock of the O. H. Co. is an individual action by Mr. G., its owner, and does not require any action by the O. H. directors. If the T. Co. itself buys the stock the purchase should be authorized by a meeting of stockholders.

The parties in interest are the ones to decide which plan they would prefer, knowing all the circumstances.

Increased Value of Fixed Assets

Editor, Students' Department:

The company with which I am now employed as bookkeeper has recently had an appraisal made of its properties which shows a figure in excess of valuation set up on the books of something like $60,000, which is due mostly to advanced prices in all acid plant equipment.

Being one of your readers, and as it has fallen to my lot to spread new figures over books, I beg to ask of you the correct method of handling this excess figure. Have asked several parties around town here and there seem to be different opinions as to whether the excess should be placed to surplus or to reserve for depreciation. I am of the opinion that it should go to the latter account, due to the fact that after the present unusual conditions prices will get back to normal or near original purchase prices paid at time of construction.

Yours truly,

A. C. P.

In no circumstances should surplus be credited with an increase in value of any fixed assets caused by the rise in their market value. No profit has been or will be made by such increase unless the assets are sold.

It is better to leave the valuations at their original figures, using the new appraisals only in case an adjustment of a fire loss becomes necessary. However, if it is desired to show an improved financial condition by increasing the value of the fixed assets, a reserve should be set up equal to the increase. If this is done by adding to the reserve for depreciation, the same effect will be produced, but this addition to the reserve should be made as an extra credit and not be allowed to interfere with the regular annual charge for depreciation, which should be continued at the same figure as would have been the case if no appraisal had been made. That is, the increase in the reserve should not take the place of all depreciation for the future until the increase is taken up.

Partnership Insurance

Editor, Students' Department:

Will you kindly answer the following question in your next issue of The Journal of Accountancy?

A corporation of two members takes out endowment insurance of $25,000 each, payable to the corporation. For instance, the first premium is $1,600 and there is no return on that insurance for three years, when the policy is worth $2,700 paid up or a loan of $1,500, and each year increases.

Kindly show journal entries and ledger account of how this should be handled.

Yours truly,

D. I. M.

A partnership life insurance policy is supposed to be kept up until it becomes a claim by death or maturity. Therefore, although it has no surrender value until the third year, it is reasonable to consider that it acquires one-third of its first surrender value each year. Under that view the entry would be:

Life insurance policy	500.00	
Life insurance expense	1,100.00	
Cash		1,600.00

At each payment after the third the entry would be to charge life insurance policy with the increase in cash surrender value consequent on the payment, and life insurance expense with the balance of the payment.

There is no question about the policy being a valid asset for its cash surrender value. It would be classified as an investment in the balance-sheet.

PRIVATE LEDGER

Editor, Students' Department:

I have been an interested reader of THE JOURNAL OF ACCOUNTANCY for about a year and I am not sure that I am entitled to ask any questions; however, I venture to ask you for some information either through your edition or a reply to this letter. I am interested to know more about keeping a private set of books belonging to a large corporation. We are planning on keeping the controlling accounts pertaining to the company's affairs, which should not be public property to the office in general, in a private ledger, and I would like to know about your system of getting these accounts transferred to the private ledger.

Also I am interested to get any information I may on a simple way of handling private individuals' accounts. This should be in such form as to enable one person (a confidential secretary) to handle the private books of the corporation as well as the individual accounts of the officers of the corporation.

Yours very truly,

H. D. T.

There are several ways in which to carry a private ledger. In all of them a ledger is provided with a lock, the keys to which are in the hands of confidential men only. A private locked journal is also used. In the private ledger are carried the confidential accounts whose details are to be kept from the general office force. In the general cashbook and journal debit and credit columns are carried with "private ledger," the total being posted to that account on the general ledger. This is, of course, a controlling account. Any items affecting the private ledger accounts are entered by the general bookkeeper in the "private ledger" columns, which ends his connection with them. The officer who keeps the private ledger

transfers these items to the private journal, the offsetting entries being to "general ledger" controlling account. When the books are closed all the closing entries are made on the private books only, the general bookkeeper knowing nothing about them.

This method will not keep cash transactions secret. If payments are to be made that it is desirable to keep from the knowledge of the general office, it will be necessary to have a private cashbook and bank account. There could then be drawn on the general bank account a cheque for a round amount, which would be charged to private ledger on the general books. When deposited in the private bank account, it could be drawn against to pay favored individuals or for any other purposes known only to the proper officers. In this way even the amount of dividends could be kept from general knowledge.

The accounts, personal or otherwise, to be kept on the private ledger will depend on the wishes of the managing officers.

Stock Dividends

Editor, Students' Department:

As a recent subscriber to The Journal of Accountancy I take the liberty of asking the following question: The company I am with has increased its capital stock from $600,000 to $800,000—$100,000 preferred and $100,000 common—$100,000 to be taken from surplus account and $100,000 to be sold. I am making this entry, crediting preferred stock $100,000, crediting common stock $100,000, charging surplus account $100,000 and opening a stock subscription account of $50,000 for preferred and a stock subscription account of $50,000 for common (we intend to dispose of $50,000 of each) and of course crediting these accounts with the cash when stock is sold. Is this correct?

They have declared a stock dividend of 10 per cent. on common stock $400,000. I am charging surplus account and crediting common stock subscription account. Is this correct? If this had been a cash dividend I would simply charge surplus account direct—our last auditor said that it was better to charge surplus direct rather than to open a dividend account as we had formerly done.

In case no part of this $200,000 increase was to be charged to surplus account I would charge the whole amount to "stock subscription account," $100,000 for common and $100,000 for preferred, and credit when a sale was made. This would leave only $60,000 of common available after providing for the above $40,000 stock dividend. This "stock subscription account" is in one sense also a transfer account, taking care of all stock (both taken up and sold by the company) and the difference in the account represents the unsold stock on hand. Trusting I may hear from you as soon as convenient to you, and thanking you very much, I remain,

Yours truly,

N. S. K.

Medina, Ohio.

You are not explicit enough in your statements. You say that of the $200,000 increase in stock $100,000 is to be taken from surplus and the same amount to be sold, but you do not say which kind of stock comes from surplus, nor which kind is to be sold. As you say that you intend to sell $50,000 of each, I infer that the $100,000 to be taken from surplus is divided equally between the two kinds. I do not understand what you mean by a stock dividend of 10 per cent. on common stock.

If I am correct, the board of directors should declare a dividend of $50,000 on preferred and the same amount on common. Then the entry would be

Surplus	100,000	
To preferred stock		50,000
Common stock		50,000

For dividend declared by directors at a meeting, etc., payable in stock.

Then stock would be issued pro-rata to each class of stockholders, and no further entry is necessary.

For the stock that is to be sold you cannot charge stock subscription account, unless the stock is all subscribed. You should charge unsubscribed stock for each class. When subscriptions are received, charge subscribers and credit unsubscribed stock. When the subscribers pay, credit subscribers.

There is no doubt that your accountant is wrong in not putting dividends through dividend account. If it is not done there is no record on the books that a dividend has been paid. In your case the stock dividend was $100,000, not $40,000. The stock covered by the dividend must be divided among the stockholders and cannot be sold unless the stockholders sign a written waiver of their right to it.

Pennsylvania Institute of Certified Public Accountants

At a meeting of the Pennsylvania Institute of Certified Public Accountants the following officers and directors were elected: President, Joseph M. Pugh; vice-president, William J. Wilson; treasurer, James J. Burns; secretary, R. J. Bennett; members of council: T. Edward Ross, Herbert G. Stockwell, James W. Fernley, George Wilkinson, Horace P. Griffith and the officers of the institute.

British Society of Incorporated Accountants and Auditors

The council of the British Society of Incorporated Accountants and Auditors has unanimously re-elected Arthur Edwin Woodington, London, president, and William Claridge, Bradford, vice-president for the ensuing year.

Missouri Society of Certified Public Accountants

At the annual meeting of the Missouri Society of Certified Public Accountants the following officers were elected: F. C. Belser, president; F. A. Wright, first vice-president; E. G. H. Kessler, second vice-president; R. C. Brown, secretary; Edward Fraser, treasurer.

The partnership of McWhorter, Boyce, Hughes & Farrell having been dissolved as of May 31, 1918, David E. Boyce, James F. Hughes and James F. Farrell will continue the practice of accountancy at 120 Broadway, New York, under the firm name of Boyce, Hughes & Farrell. Charles F. McWhorter will continue in practice individually.

Book Reviews

BOOKKEEPING AND COST ACCOUNTING FOR FACTORIES, by WILLIAM KENT. *John Wiley & Sons,* New York.

A book 8⅛ x 10¾ is always ungainly. Such might be the reaction to the book under consideration at first glance. A perusal of the preface might give one a second disagreeable reaction. "The time has arrived," says the author, "when there is a need for a systematic treatise on cost accounting which will start the student at the beginning with the elementary principles of double-entry bookkeeping and lead him through factory accounting to cost accounting, giving him not only the fundamental theory in accordance with the views of the ablest modern accountants, but also warning him against the time-worn fallacies of the older school. Such a treatise the author has undertaken to prepare." This duty apparently has made itself felt because "some accountants . . . are still perpetuating traditional errors. Some of them are still insisting that interest on investment forms no part of factory cost; that business and selling expense are part of cost; and that a profit cannot arise until a thing is sold."

The first chapter contradicts the claim for modern methods. Such obsolete terms as "to mdse." and "by cash" are advocated. The specimen cashbook exhibited is of ancient design. The statement is made that the "entry 'by balance....' on the Cr. side is usually made in red ink." Further, the student who wishes to learn more of the details of bookkeeping than are given in the above highly condensed treatment is advised to purchase two or three old books on the subject at a second-hand book store and get the views of different authors on the fundamental theory, then for a great variety of detailed instruction and forms, with much good advice, to get a recent edition of J. H. Goodwin's *Improved Bookkeeping and Business Manual.*

One finds little in the first fourteen chapters of the book which is not in other books. The material is presented without apparent regard for logical order or sequence of thought. It might almost be said that this much of the book offers no excuse for its existence.

Chapters XV to XX are welcome additions to the literature of cost accounting. They present such subjects as "Modern accounting systems for steel works," "Foundry costs," "Hardware factory and machine shop accounting," "Costs in a woodworking shop; a bakery; a textile mill, a power plant," "Costs in a printing shop." These chapters are made especially useful through the complete and excellent assortment of forms which accompanies them.

The return to the form exhibited in the early chapters is apparent in the last chapter, the composition of which is as follows: "Reports to stockholders; education of accountants; cost of idleness; miscellaneous forms; bibliography."

Posterity might have struggled on successfully had about three-fourths of this book remained unwritten. The remaining fourth should serve a useful purpose and be much appreciated. This may compensate the author for the vast amount of work he must have put into the preparation of the book.

JOHN RAYMOND WILDMAN.

CREATING CAPITAL, by FREDERICK L. LIPPMAN. *Houghton, Mifflin Co.*, Boston and New York. 75c. net.

In a handy pocket edition comes a little essay on business ethics by Frederick L. Lippman which has been delivered as the second of the Barbara Weinstock lectures on the morals of trade at the university of California. Mr. Lippman treats the subject from a practical business point of view. Money-making has ceased to be the sordid occupation of the old philosophic view. It is a means of creating capital, and only by creating capital can man advance in civilization. Capital is used in a broad sense, meaning not so much the economic fund from which profits are made as the sum total of all established comforts and necessities we find about us. All the great works of art, monuments, buildings, etc., are so much capital handed down to us from the past, and it is man's duty to continue creating capital for those who come after us. Every advance in civilization, from a material point of view, means more wants to be satisfied—hence more business and more creating of capital by the process of making and saving money. There is no end to the process seemingly, for it is about as certain as anything can be in this uncertain world that when man ceases to save something for the future, i. e., create more capital, all progress will stop and retrogression will set in. This principle made clear, Mr. Lippman describes in a general way the steady growth in business ethics and morals in this country. While he does not ignore the increasing altruistic tendency of the age, he shrewdly points out that it pays. Better work, larger output and greater gains usually follow better conditions.

W. H. L.

HIGHER EDUCATION AND BUSINESS STANDARDS, by WILLARD EUGENE HOTCHKISS. *Houghton, Mifflin Co.*, Boston and New York. $1 net.

Another of the Barbara Weinstock lectures is by the director of business education at the university of Minnesota, Willard Eugene Hotchkiss. It covers the same subject as the one by Mr. Lippman, but naturally treats it from the view-point of the educator. By long and patient evolution the business world has attained a certain standard of ethics and morals and it is now the turn of the university to set up even higher standards and train young men to support them. Not only scientific efficiency should be sought, but the psychology of human relations should

be studied. Business, so regarded, becomes a profession in itself, a fact which universities are generally recognizing and providing for. The universities are not to attempt the work of the shop or office, i. e., to train young men in the minutiæ of business practice, but are to train them to take broad and comprehensive views of business in its relations to public welfare. Business is not, or should not be, a matter of making gains for oneself, but a training in service to the public for which, of course, commensurate rewards are to be expected.

Comparing the two essays the reviewer is struck with the curiously opposing principles underlying them. In Mr. Lippman's essay we have the enlightened selfishness theory of Herbert Spencer as the moving force. In Mr. Hotchkiss', altruism seems to be the force and the goal. Each recognizes the opposing element of the other to some extent, to be sure. It would be difficult to quote chapter and verse to verify the position of either, but such is the general impression left upon the mind of the reviewer. While such an impression is not a matter of any particular importance, it will serve to epitomize in a way the profound questions which the business world will have to solve after this war. The political questions of autocracy and democracy are not the only ones fighting for the mastery—economic and industrial problems must also be solved. And the latter, since the debacle in Russia, appear to be of a three-fold nature. To be explicit, in Germany we have the efficient militarism which extends to every department of political and industrial life; in England, France and America, we have the enlightened selfishness under self-limited governments which have made each great in its own way industrially; and in Russia of today we see the result of altruism carried to the *n*th degree under a "government" of the demos pure and simple, in a word, Bolshevikism. For a "discredited philosopher" Herbert Spencer seems to have been remarkably prophetic, for it is forty odd years since he outlined the course evolution would be likely to take where society was based on militaristic, communistic (i. e., altruistic), and "enlightened selfishness" principles, respectively. Far be it from us to attribute Bolshevik principles to Mr. Hotchkiss, but it cannot be denied that Bolshevikism is merely altruism carried to its extreme logical conclusion.

What changes in industrial America the war will bring about no man can predict with any confidence. The ideas in these two essays are well worth careful study by any man who hopes to take an active part in the reconstruction of the business world, for if we are to make a new start we will need not only the courage of our convictions but sound reasons for them. Democracy as we know it in America will never be in greater peril than when peace comes and the industrial world struggles to get back to a normal basis. Against the flood of fads and isms of all kinds that will threaten us then only clear thinking and steady heads will avail. Such essays as these are a help, and the university of California deserves thanks for making them accessible to the general public.

W. H. L.

REMINISCENCES, by GERARD VAN DE LINDE, F.C.A. *Gee & Co.,* London. Twelve shillings and sixpence net.

When a man attains the ripe age of 78 and is evidently in full possession of all his faculties, including a good memory, it goes without saying that his reminiscences usually make good reading. That it is not necessary that one should have been prominent in state affairs to make his recollections of a long and busy life interesting is proved by the amusing book written by our English confrere, Gerard van de Linde, F.C.A. The title is well chosen, for the book is not an autobiography as we usually understand the term, and there is little of the shop in it. Mainly it is a running, discursive account of many trips about the British Isles, the continent, India and one to Cuba, telling of people the author met, the experiences he encountered, and his observations on manners and customs in general. It is a book for the leisure hour, just as one would enjoy a chat with a traveled friend over an after-dinner cigar.

Mr. van de Linde is already well-known in English accounting circles for a number of professional books he has published, but his latest (we hope not his last) book was written as a labor of love (to quote his own words), the proceeds of it being devoted to the Chartered Accountants' Benevolent Association. Therefore every buyer of a copy in America will be aiding a worthy charity among our English brethren, a charity which is undoubtedly having pretty rough sledding these days.

W. H. L.

Sully, Hood and Strong announce the dissolution of partnership. James O. Sully will continue his accounting practice at 705-7 Merchants National Bank building, San Francisco. Walter Hood and Addison G. Strong will continue their accounting practice under the firm name of Hood & Strong at 1312-17 Merchants National Bank building, San Francisco.

Mortimer A. Davis, Earl G. Teeter, and Clarence A. Niquette, announce the consolidation of their accounting practices under the firm name of Davis, Teeter & Niquette, with offices at 333 South Dearborn street, Chicago.

Charles Neville & Company, Savannah, Georgia, announce that the name of the firm has been changed to Neville, McIver, Barnes & Co., the offices remaining as before.

Arthur E. Andersen & Company announce that C. M. DeLany has withdrawn from the firm of Andersen, DeLany & Company and that the firm will continue as Arthur E. Andersen & Company.

C. A. Johnston and F. O. Straight announce the removal of their offices to L. C. Smith building, Seattle, Washington.

Hollis, Tilton & Porte announce the removal of their offices to suite 1364-1368, Penobscot building, Detroit, Michigan.

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Essential Features in a Report for Credit Purposes*

By R. H. Leamy

In preparing a report for credit purposes, the accountant should have constantly in mind the fact that he is being relied upon to furnish the data from which the banker or prospective creditor can arrive at a decision as to whether or not it is reasonably certain that the borrower's paper will be met promptly at maturity; or, in case any unexpected and unforeseen contingency arises which temporarily delays payment at maturity, whether or not the final discharge of the obligation can be depended upon. If accountants would keep this idea constantly before them, there would be a noticeable improvement in the statements prepared by them for credit purposes.

In a report for credit purposes, the items on the balance-sheet should, of course, be segregated under appropriate captions, the assets generally coming under the headings "fixed assets," "current assets" and "deferred charges to profit and loss" and the items on the right side generally falling under the headings "capital stock" or "partnership accounts," "bonds" (or other long time obligations), "current liabilities" and "reserves." While other captions appear on the balance-sheets coming before the busy banker for his scrutiny and attention, the foregoing include the items ordinarily found and to which our attention will be confined in this article.

As the banker's principal thought in deciding on the desirability of a loan is the certainty or lack of certainty of its repayment, it

*A thesis presented at the May, 1918, examinations of the American Institute of Accountants.

naturally follows that his attention will be first directed to the current or quick assets and that they will be subjected to a close scrutiny and investigation. The term quick assets includes cash and such other items as can presumably be quickly turned into cash, such as inventories of material and merchandise, bills and accounts receivable, securities owned, etc.

With respect to the inventory, one of the first things the banker will be interested in knowing is whether or not it is the result of a physical count. If a physical inventory was taken, was the method followed such that the results can be depended upon? Or if book records were relied upon in making up the figures, upon what basis have the stock records been kept and how trustworthy are they?

Another important point to be considered is the basis adopted in pricing the various items listed. Are they at cost or market and what is the approximate variation between the two? It is a comparatively easy matter to arrive at the unit cost of various items of raw material and merchandise purchased ready or practically ready for sale, but in the statements of a manufacturing company, there will appear goods in process and finished stock, and here the question immediately arises as to whether or not the concern maintains an adequate system of cost records and, if so, just what items are being included as part of the cost of manufacture.

Has the inventory been inflated by including therein items which cannot fairly be considered part of the cost, or, as is sometimes the case, is there profit included? Has the clerical work in compiling the quantities and in extending and adding the sheets been rechecked? Overstatements or understatements of inventories by substantial amounts frequently result from simple errors in calculation. To illustrate a case in point, a clerk's error in misplacing the decimal point in the unit cost of an item resulted in an overstatement of the inventory by about $140,000.00.

Another matter of very great importance is whether there is obsolete or damaged stock included in the inventory. Changes in style or in the product occur rapidly in certain lines of business and in the statement of such a concern this point should be looked into carefully.

It goes without saying that the report should state if any portion of the stock is subject to a lien or is pledged as security for

the payment of any debt, if there are any consigned goods included, and whether or not the liabilities have been taken up for all goods inventoried.

Next in order come the bills receivable. What proportion of them can we reasonably expect will be paid when due? Are there included therein some which are either wholly or partly valueless and which will have to be extended from time to time as they mature and eventually be settled by compromise? Are there any which are past due or have already been renewed one or more times? Are they all notes of trade debtors taken in the ordinary course of business, or do some represent advances or loans to employees, officers or subsidiary concerns, or notes accepted in payment of equipment or fixed assets disposed of, or even of capital stock sold? It is a well-known fact that in certain lines of business the more valuable customers buy only for cash or on open account, settling promptly at maturity, and that notes are taken only from customers who are "slow pay." Dealers in farming implements frequently accept notes payable in instalments over long periods and this, if found to be the case, should be covered fully in the report. A manufacturer of one variety of farming implements, dealing directly with the farmers, accepts in settlement of goods sold the purchasers' notes payable in instalments over periods of from two to four years.

It will readily be seen that all of the foregoing queries have a distinct bearing on the value of the bills receivable as a current asset and unless the points mentioned are carefully inquired into and reported on by the accountant, the value of his report to the banker will be seriously affected.

Practically all the foregoing remarks regarding bills receivable apply also to the item next on the balance-sheet—accounts receivable. These must be carefully scrutinized for bad, doubtful and overdue items and a sufficient reserve must be provided. Prospective allowances in respect of discount, freight, etc., must also be estimated and provided for.

Are there included any personal accounts of officers or employees, any advances to allied or subsidiary companies, or any open accounts of any substantial aggregate in respect of the sale of items outside the concern's regular line of trade? As regards advances to officers or allied concerns, numerous instances can be cited where such accounts are carried along from year to year

without any effort being made to collect them. Are there any debits on account of uncompleted contracts on which payment cannot be expected until the contracts are completed, or are any of the accounts in the hands of attorneys for collection?

The geographical distribution of the accounts should also be looked into, as it will readily be seen that if a substantial portion of a firm's debtors were located in one section of the country and business in that section happened to be adversely affected by a crop failure, hurricane or other calamity, the creditor's concern would be in line to suffer a substantial loss on account of bad debts.

Advances to salesmen to cover traveling and other expenses should be shown separately, if they aggregate any substantial amount.

The details of the items comprising the open balances of the various accounts should be looked into, as instances are numerous where the current charges are settled promptly as they fall due, leaving old items in dispute unpaid.

Frequently accounts receivable are sold to discount companies or are hypothecated as security for loans, and in such cases it is highly probable that the best of the accounts has been taken. Do any of the debit balances represent memorandum charges covering consigned merchandise? In the ordinary course, such accounts do not become current assets until the consignee has disposed of the goods. Do one or two accounts make up the greater part of the aggregate outstanding? In this case the failure of one of these large debtors would seriously cripple the applicant from a financial point of view.

From the foregoing it will be seen that there are many questions affecting the value of bills and accounts receivable when considered from the viewpoint of whether or not they are quick or current assets. Next to cash on hand, it is to these two sources that the banker must first look for a repayment of his loan, and it will be seen, therefore, that a thorough inquiry into these two assets is of vital importance in an examination for credit purposes.

Surplus funds of the applicant may have been temporarily invested in securities which can be quickly disposed of and such items should, of course, be included among the current assets. Securities purchased to obtain an interest in or control of other

companies and which are of more or less value to the applicant, aside from the interest thereon, should not be classed as current assets. The report should give a list of the securities and state whether carried at market or cost and if at the latter, how it compares with the market value. If market prices are not available, the approximate value should be given, based on the latest available reports of the companies in question.

On seeing the item "cash in bank and on hand" in a balance-sheet with no further comment thereon, the banker is justified in assuming that the funds are available for disbursement as required, and the accountant should satisfy himself regarding this question. Frequently moneys are deposited under a special arrangement whereby they are not to be withdrawn for a stated period, say ninety days, and, furthermore, deposits in banks are frequently tied up by liens filed against the deposits, in which case the amounts may not be available for months.

Was the amount shown as "cash in office" represented by actual currency or cheques at the date of the balance-sheet, or was it principally I. O. U.'s?

The accountant should satisfy himself that the total of the cash in banks and on hand is normal for the particular concern, having in mind the nature of the business conducted and business conditions generally. It frequently occurs that a substantial cash balance is built up in anticipation of heavy disbursements to be made, such as dividends to be paid, and that what was a satisfactory balance in the bank on, say, December 31st, may dwindle to almost nothing on January 2nd.

While the banker will look first to the current assets for a repayment of his loan, in case of an insufficiency of these, he will have to fall back upon the fixed assets along with the other creditors, provided there are no prior claims on these properties. The report should cover, in a general way, the assets of this nature, stating whether or not they are subject to mortgages, etc., and whether or not they are being maintained in an efficient condition. The accountant should satisfy himself that only actual additions and improvements have been capitalized and that proper provision is being made for depreciation. A point of particular interest to the banker is whether the properties involve heavy carrying charges without any corresponding increase in the income.

The deferred charges at the date of a balance-sheet are of no

particular interest to the banker. They should be looked into a general way, however, to insure that the current year's operations are charged with the proper proportion of such items.

Current liabilities consist generally of bills and accounts payable and accruals for salaries, wages and other charges falling due in the near future.

The report should subdivide the bills payable into at least four classes: notes sold through brokers, notes discounted at the applicant's own banks, notes given in settlement for merchandise and raw materials purchased and notes given to individuals, such as officers, stockholders, employees, etc. Needless to say, the report should state the approximate amount falling due each month subsequent to the date of the balance-sheet, together with the interest rates. Information should be given, also, as to the amount of notes of similar classes outstanding at various dates in the past, as this is of value to the banker in determining whether or not the applicant is generally dependent on borrowed funds for the conduct of his business and how near the limit of his credit he may be at the moment.

Notes to officers, stockholders, employees, etc., should be inquired into carefully as they may possibly be secured by liens on some of the assets. Of course, special mention should be made of the fact in case it is found that any of the notes or other liabilities are secured by liens or mortgages on any of the assets, as well as of the fact that notes have been given for purposes outside the ordinary business of the applicant, if such is found to be the case.

The accounts payable should be covered in the report in about the same way as the bills payable. If there are particularly large items in the list, these should be looked into and commented on. The accountant should also satisfy himself that all accounts payable and other liabilities applicable to the period under review are taken up in his accounts.

Reserves covering liabilities actually incurred and falling due within a reasonable time should be included among the current liabilities, and reserves for depreciation, bad debts, etc., should, of course, be deducted from the assets to which they relate.

Long time obligations, such as bonds, mortgages, etc., should be investigated and commented on, as they are generally secured by a mortgage on the fixed assets at least and sometimes may be a

lien on the current assets. Furthermore, it is quite possible that some of these liabilities fall due in the near future, and in any event the interest falling due regularly is a current liability. If the provisions of the mortgages securing such liabilities are not being complied with, the fact should be reported.

An important point frequently overlooked in reports for credit purposes and one of decided interest to the banker is that of contingent liabilities. Liability on account of notes discounted, endorsements for allied or subsidiary concerns, accommodation endorsements, liability on contracts for the construction of buildings, purchase of equipment or raw material, and similar matters come under this caption. These should be covered fully in the accountant's report, as they have a decided bearing on the desirability of the loan from the banker's point of view.

A good illustration of the importance of such items is the case of a concern manufacturing farming implements, which recently reported at the year-end current liabilities of about $500,000.00. On going through the contract file, however, it developed that contracts had actually been signed prior to the year-end for additions to plant and equipment involving an expenditure of some $800,000.00, the work to commence in the immediate future.

A profit and loss account should be submitted with the income and expenditures classified under appropriate captions, and, if possible, this statement should show the operations for at least three or four years, arranged in comparative form. If comparative figures for several years are submitted, the accountant must satisfy himself that the figures for all periods are prepared on the same basis. Instances are frequent where concerns make a liberal provision for depreciation, etc., in prosperous years and reduce, or even eliminate, the same item in lean years. Occasionally, a basis of inventory valuation is adopted differing materially from the basis used the year before, and some concerns show a tendency to charge to capital during lean years items of a nature which are absorbed in operating expenses during prosperous years.

Increases or decreases in the sales should be looked into. A recent investigation of a manufacturing concern disclosed a substantial increase in sales when compared with the operations of the preceding year, but on closer investigation it was disclosed that the increase was due entirely to the fact that large orders had been received from two new customers. Had this new business not been

obtained, the sales for the last year reported upon would have shown an actual decrease.

The foregoing remarks include some of the more important points to be covered in a report for credit purposes. However, each individual case has its peculiar features which must be looked into and reported on, and the accountant must keep in mind at all times the fact that the banker is relying upon him to disclose all the material facts in the case.

Corporation Organization and Accounting*

By William H. Bell

II.

Capital Stock Records

The laws of some states prescribe the records of stock outstanding which shall be kept by corporations. The only requirement in the state of Missouri is that corporations must "keep a book in which the transfers of shares of stock shall be registered, and another book containing the names of its stockholders." This requirement can be fulfilled in the case of small corporations by the stock certificate book and the general ledger, but all except very close corporations should keep a stock ledger and stock certificate book, and corporations whose stocks are widely held should also keep a stock transfer book.

Large corporations frequently employ one or more trust companies as registrars or transfer agents, or both, in which case the trust companies keep all records relating to capital stock.

A stock ledger is a simple record showing, as to certificate numbers and shares, the stock issued to, transferred from, and held by each stockholder, with dates. Some ledgers also show from whom and to whom stock was transferred. There has been considerable discussion by writers on accountancy as to whether stock issued should be debited or credited to the stockholder in a stock ledger. As a matter of fact it is utterly immaterial and there is no occasion for heading the columns Dr. and Cr.; however, if all the accounts were in the general ledger they would be credits.

A stock certificate book is merely the stubs of the stock certificates, which show the essential facts as to the certificate issued, including from whom transferred, and often bear the signature of the stockholder as a receipt for the certificate. It is customary to paste canceled certificates on the stubs. Thus a complete list of stock outstanding may be compiled from the stubs still open.

When a stock transfer book is kept it is not customary to keep stubs of certificates, although it may be done. This book shows on one side the certificates canceled, and on the other certificates

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issued—as to date, name, certificate number and number of shares. Obviously, the two sides must balance. This record is used as a medium for posting to the stock ledger.

Separate records are usually kept for each class of stock, but it is convenient to show the total holdings of each stockholder in the stock ledger by means of columns for each class. As a result of a reorganization, common stock may be issued pro rata to preferred stockholders, or vice versa, both being evidenced by the same certificate. In such cases a combination transfer book might be used to advantage.

The method of recording subscriptions to capital stock has been described in the foregoing. If an auxiliary ledger be kept it may be a simple stock form.

Treasury Stock

There appears to be much misapprehension on the part of business men regarding the meaning of the term treasury stock. Treasury stock is capital stock that has been issued by a corporation for value and subsequently comes into its possession by gift or purchase. It should be distinguished from unissued stock. When a company holds some of its stock in the treasury the capital liability should not be changed, but the stock should be carried as an asset. However, the treasury stock may be deducted on a balance-sheet, to show the stock outstanding.

In most states there is some restriction on purchase of their own stock by corporations if they have debts, the principle being that creditors would thereby be deprived of their security. The Missouri law provides that a corporation may not buy its own stock but may take it in consideration for the surrender of an overdue note, and resell it, where such action is clearly in the interest of the corporation. The majority of occasions for a corporation holding its own stock are where the stock is issued to a promoter for property or services and donated to the corporation to be sold for the purpose of providing working capital. This procedure is quite customary in the organization of mining companies. A slight variation, but with no essential difference, is where common stock is donated to a company to be given to purchasers of preferred stock. Such stock is frequently held by a trustee, and not entered on the books, which appears to be preferable in most cases.

Authorities differ as to the proper valuation of treasury stock on the books. In the opinion of the writer, the valuation should depend upon the circumstances of its acquisition and the intention as to its disposal.

If the stock is acquired in settlement of a debt, in accordance with the Missouri law it must be sold within a reasonable time, and therefore it would seem that no good purpose would be served by appreciating or depreciating it to par. Adjustment would of course be made, charging or crediting profit and loss, upon disposal of the stock.

If the corporation is permitted by law to purchase its stock and hold it indefinitely, which is in effect a reduction of capital stock, it would seem that the book value should be adjusted to par. In such cases appreciation on account of discount should be credited to a special reserve account and in no event be considered as earned surplus available for distribution as dividends. On the other hand, any premium paid is virtually a purchase of the proportion of surplus pertaining to the stock and should therefore be charged against surplus. The balance of surplus belongs to the holders of the stock outstanding. Treasury stock cannot be voted, nor can dividends be paid on it.

If the stock is donated to the company, whatever value is placed upon it should be credited to a reserve account as explained above, which in this case might be called donated capital or any other title sufficiently descriptive. In the opinion of the writer this value should be nominal, but a value should be placed upon each share, say one dollar. Then when the stock is sold any excess realized will be credited to the reserve account, or if the stock is given as a bonus the entry setting it up as an asset will be reversed. When the stock has all been disposed of, the balance of the reserve account may be allowed to remain or may be credited as a reduction of the capital investment (asset) accounts for which the stock was originally issued. While this latter is unquestionably preferable from the standpoint of conservatism, it would seem desirable to conform throughout the records to the position taken in the beginning that the stock was fully paid, which would, of course, be nullified by crediting the property accounts with donated capital, as such. However, if it is desired to reduce the assets, the donated capital account should be transferred to profit and loss and an equivalent amount charged to that account and credited to

the property account as depreciation or amortization. In any event the corporation should not treat the donated capital as surplus from which dividends may be paid.

Reduction of Capital Stock

A reduction of capital stock outstanding by redemption or conversion must be authorized by the secretary of state, and, in Missouri, must not diminish the stock outstanding to an amount less than the corporation's liabilities.

A company may redeem its preferred stock, for example, in accordance with its charter, at 110 per cent. This premium is chargeable to surplus, as explained in the case of treasury stock purchased at a premium.

If a corporation is found to be over-capitalized, a majority of the stockholders (in Missouri) may vote to reduce the par value of the stock or reduce the number of shares, to be applied pro rata to all stock outstanding. This action does not affect each stockholder's interest in the business, as there is no change in the actual assets, but it results in a book profit equal to the amount of the reduction. However, it would be very unwise to consider such a profit as available for dividends. The following entries are suggested to record such a reduction of capital stock:

No. 1

Capital stock	$200,000	
To profit and loss		$200,000
For reduction of common capital stock from $400,000 to $200,000 by calling in old stock and issuing one share of new for each two of old, in accordance with minutes.		

No. 2

Profit and loss	$200,000	
To property (or goodwill)		$200,000
For depreciation of book value of ——, equivalent to reduction of capital stock, in accordance with minutes.		

Such entries should always be made through the profit and loss account.

Organization Expenses

Almost invariably, corporations incur considerable expense in organization—legal fees, organization taxes, perhaps commission on sale of stock, etc. Obviously, it would not be proper to charge such items as expenses of the first fiscal period; nor, in the judgment of the writer, should they be permanently capitalized, although a corporation could not be severely censured for doing so. They should preferably be charged to organization expenses account, which should be carried as a deferred charge until the directors decide to write it off, when it should be amortized by charges to profit and loss over a period of not more than three to five years. It may be said, however, that the United States treasury department will not permit deductions for organization expenses in computing net income for the imposition of the income tax.

Organization expenses should include all expenses and losses incurred by the corporation up to the time of the beginning of normal operations, that is, during construction, experimental and developmental periods. It sometimes happens that a new manufacturing company, especially one employing secret processes, etc., may make some sales before it can be considered as having really commenced operations.

Frequently, organization expenses are combined with goodwill and shown in one account. There can be no serious objection to this, but it should not be advocated, as there is little likelihood that the goodwill will be written off. Being acquired in consideration for capital stock issued, goodwill is presumed to be worth its face value at organization, and if it does not enhance in value there is little probability of there being any surplus against which to write it off. On the other hand, organization expenses represent dissipation of the capital invested, even though the manifest purpose is to enable the company to do business.

Dividends

The method of distributing the profits of a corporation to its stockholders is by the declaration and payment of dividends. Regardless of the amount of a corporation's net income, if in the judgment of the board of directors it is inexpedient to distribute such income for the reason that the money is needed as working capital or as a reserve fund, the stockholders have no right to a

distribution. However, cases are numerous in which minority stockholders have brought successful legal actions against boards of directors to compel them to declare dividends when it could be shown that the directors were not acting in good faith but were paying themselves, as officers, large salaries and concealing the true profits, or that the funds were not actually needed in the business. But it may be stated as a general rule that this subject is largely left to the discretion of boards of directors.

It is illegal in all states to pay dividends out of capital. The Missouri law provides that directors voting to declare and pay a dividend while the corporation is insolvent, or that will make the corporation insolvent, or that will impair the capital, shall be jointly and severally liable for all debts of the corporation then existing or that will be contracted while they are in office. Directors who are absent from a meeting when such a resolution is adopted, or who cause their dissent to be recorded in the minutes, are absolved from liability. While it is not difficult to determine insolvency in a practical sense, that is, inability to pay debts, it is unfortunate that there is no well recognized standard whereby it may be determined in doubtful cases whether a corporation's capital is impaired. Such a standard would comprehend the application of adequate rates of depreciation of property, proper valuation of inventories, etc., and would accord with sound accounting principles generally. It may be said that conditions in regard to the general adoption of proper accounting methods are improving because of the activities of professional accountants, commercial associations and public commissions and, to no small degree, to the imposition of income taxes and the promulgation of rules governing the determination of taxable income.

Dividends are declared at a certain amount per share, or percentage of par value, of the certain class of stock outstanding (exclusive of treasury stock). It is customary for companies whose stock is listed on an exchange to stipulate in the declaration that the dividend will be paid on a certain date to stockholders of record on a date a few days prior, and that the transfer books will be closed, permitting no transfers, for a certain number of days following the date of crediting the dividend. Any sales of stock between the date of crediting and the date of payment would be "ex-dividend," that is, the dividend would be paid to the seller, who was the holder of record.

Proper accounting requires that upon declaration of a dividend it be charged on the books to profit and loss or surplus and credited to dividends payable, the payments, when made, to be charged to the latter account. This is especially necessary if the date of closing the books intervenes between the date as of which declared and the date of payment—otherwise the payment may be charged to profit and loss or surplus. However, the former procedure is preferable for the reason that the declaration of a dividend constitutes the creation of a liability to the stockholders, which can only be rescinded by the directors if it has not been made known to any of the stockholders except themselves or if it is ascertained before payment that the declaration was illegal.

A corporation's liability to a stockholder on account of a dividend declared may be applied as an offset to a debt due to the corporation by the stockholder.

Preferred stock, even cumulative, is no different from common stock regarding the necessity of declaring dividends thereon. However, as dividends on preferred stock are considered by most issuing corporations as virtually fixed charges, the same as bond interest, it is not unusual for directors to declare dividends on preferred stock to be paid regularly until revoked.

Dividends may be declared payable in property other than cash. For example, many dividends have been recently paid in Liberty loan bonds and Anglo-French bonds.

If a corporation has accumulated a large surplus the corresponding assets of which are needed in the business, it may change the form of the stockholders' ownership by declaring a stock dividend and converting the surplus into stock. If in doing this it is necessary to increase the authorized issue of stock, authority will have to be granted by the secretary of state and the tax will have to be paid, as already explained. To record a stock dividend only one entry is necessary, viz., charging surplus and crediting capital stock.

It seems clear that the corporation has parted with nothing in paying a stock dividend, and therefore the stockholders have received nothing. Assuming that a corporation had capital stock of $100,000 (1,000 shares, par value $100), and surplus of $50,000, and that it paid a 50 per cent stock dividend (the entire surplus), the only change in the status of each holder of ten shares of the original stock is that whereas he owned 10/1000, or 1 per cent, of

the net assets of the business ($150,000), now he owns 15/1500, the same percentage, of the same property. There has been a great deal of discussion of this question, particularly with reference to the income tax. The income tax law of September 8, 1916, as amended by the law of October 3, 1917, specifically includes stock dividends as income of the recipients "to the amount of the surplus so distributed." As a matter of fact, nothing is distributed, except that the stockholder has now two pieces of paper instead of one. The United States supreme court has held that, under the income tax law of October 3, 1913, stock dividends did not constitute taxable income. However, that law has been repealed, so that the validity of that provision of the present law will probably be tested in the courts. There may be some justification for the tax but if stock dividends are to be taxed all other undistributed income should be similarly taxed.

There is another form of dividend, although it is not called by that name. It is customary for taxes on bank stocks to be assessed against the holders, but payable by the banks, at the rates prevailing in the various counties, etc. As these taxes are paid for account of the stockholders, the banks have a right to be reimbursed by them. This is usually effected by deducting from dividends or, probably more frequently, by adjusting the charges upon the basis of the highest rate of tax, so that the status of the stockholders is equalized by paying to each one or for his account as taxes the same amount per share. In whatever manner adjusted, or even though no adjustment be made, the stockholder has actually received the equivalent of a dividend and has actually paid his proportion of the tax. This principle is recognized by the income tax regulations.

So far, we have considered only dividends representing distributions of earnings. The subjects of dividends in bankruptcy and in dissolution present no problems worthy of special mention, but distributions by a going concern on account of capital are deserving of discussion.

There is a popular notion, especially among stockholders of companies owning and operating mineral, timber, oil, and quarry lands, buildings on leased ground, etc., that such companies are exempt from the general rule that the original capital must be kept intact, and are consequently permitted to exhaust their capital by distributing to stockholders the balance of their surplus accounts

without making provision for depletion or amortization of mineral deposits, stumpage, etc. As the writer makes no claim to being an authority on corporation law, he can only state that there appears to be no legal sanction for this belief, but, as the provision of law to the effect that capital may not be impaired by the payment of dividends is solely for the protection of creditors and stockholders, in the absence of any protest by them to distributions consisting partly of income and partly of return of capital, the courts have no occasion to interfere.

The theoretical result of distributing to stockholders the profits without providing for depletion, etc., is that upon exhaustion of the property (or termination of the lease, when the property reverts to the lessor), and after all liabilities are paid, and the net profits shown by the surplus account distributed to stockholders, only two accounts remain on the books, property and capital stock—there being no property, the capital stock is valueless. However, examples of such a procedure are now rare, as most corporations whose products are obtained from natural deposits or growth charge their cost of production with the cost (actual or estimated) of the material removed, crediting their property accounts. The principle is well illustrated by a comparison of two coal mining companies—one leasing and the other owning its property. The former pays a royalty of a certain amount per ton mined, which is charged to cost; the latter has paid for its coal in advance by buying the property; therefore cost should be charged at a rate per ton representing the total cost of the property divided by the estimated total tonnage—the property account being credited. Under such a method, the total net profit shown by the books may be distributed and after the property is exhausted and all liabilities paid the capital stock account will be offset by cash or some investment thereof other than property. Manifestly, if adequate provision for depletion be made by charges to surplus, any distributions to stockholders not in excess of the credits to surplus are dividends out of income. They can constitute repayments on account of capital only to the extent that they exceed the credits to surplus.

Some mining corporations in making provision for depletion of mineral deposits credit the amounts to reserves instead of to the property accounts. Then they make distributions to stockholders, in addition to regular dividends, said to be out of the

depletion reserves and therefore constituting repayments on account of capital. If the distributions were actually charged to the depletion reserves, the provisional charges to surplus would be nullified, as the net book value of the property would not be reduced; but the distributions would constitute repayments on account of capital only if the entire net income credited to surplus had been paid out as dividends. In those cases coming under the writer's observation, the distributions are not charged to the reserves. Regardless of the bookkeeping entries, if the company makes provision for depletion, the rule stated above holds, namely that any distributions to stockholders, under whatever designation, constitute repayments of capital only to the extent that they cause a deficit to be shown in the accounts.

It may be stated as a general proposition that dividends should not be paid out of donated working capital, surplus created by revaluations of assets or surplus paid in by stockholders. This is in the interest of conservatism and for the protection of prospective investors and creditors. Payment of dividends is almost certainly to be construed as an evidence that the business is prosperous, whereas it may be actually losing. Under the present abnormal conditions, nearly all corporations could make large paper profits by revaluing their buildings and equipment upon the basis of reproduction cost less accrued depreciation. The interest of creditors may be jeopardized by the payment of dividends from surplus which has not been actually earned, through the depletion of the assets or the creation of a liability, as a corporation may borrow money to pay dividends.

Although this principle applies to premiums on the sale of the original issue of capital stock, in the opinion of the writer there is no similar argument against the distribution of premiums on sales of subsequent issues, which would not command a premium unless the company had surplus assets or earned a commensurate return. In that case, the purchaser of the new stock pays for his proportion of the surplus assets or of the intangible value of the business at that time, and thereafter each of his shares has an interest equal to that of the old stockholders. There seems to be no reason for not distributing as a dividend the premium on new stock if desired. Although part of such premium will be returned to the payers, the old stockholders are compensated for their share of the old surplus.

Assume that the stock of a corporation, par value $300,000, has a book value of $450,000, or 150 per cent, and additional stock, par value $100,000, is sold at book value. Then the company will have capital stock of $400,000 and surplus of $200,000. It declares a dividend of $50,000, representing the premium on the sale of the new stock. Of this dividend, $12,500, or 25 per cent. of the premium paid, will be returned to the purchasers of the new stock, and the old stockholders will receive $37,500 in consideration for the equivalent amount of the old surplus (25 per cent. of $150,000) relinquished by them.

There is no objection to a company's distributing in the form of stock dividends any amounts of surplus paid in or taken up as revaluation of assets, because as has been explained before, the company parts with nothing and therefore no interest will suffer. However, it should be remembered that under the present income tax law, stock dividends are considered taxable income of the recipients to an amount equal to the earnings so distributed, although those representing appreciation of assets are specifically excluded.

Affiliated Companies

The decade from 1900 to 1910 witnessed the formation of most of the great industrial combinations of this country. These so-called trusts were the inevitable outcome of wasteful competition. Some of these combinations were effected by mergers, the physical properties being acquired by one of the competing companies or by a new company, which operated the other plants as branches, but in perhaps the majority of cases a holding company was formed, which acquired a controlling interest in the operating companies through stock ownership. There are also many holding companies whose subsidiaries are not engaged in what would otherwise be competitive business; for example a system of oil companies may consist of producing, pipe line, refining, tank car, tank wagon and other selling companies.

The stocks of the subsidiary companies acquired are usually paid for with the stock of the holding company, either by exchanging with the individual holders or through an intermediary. Therefore, the stocks of the subsidiary companies owned will be valued at the par value of the stock of the holding company issued therefor. Usually such stocks constitute virtually the entire assets

of the company, and dividends thereon are its sole source of income.

When a group or system of operating companies, such as the oil companies cited above, is subsidiary to a holding company, the policy may be so controlled as to effect an arbitrary and disproportionate distribution of profits. For example, an oil producing company may sell to its affiliated refining company at cost or at a profit, and the refinery may sell to its distributing company at cost, a reasonable rate of profit or the price to the consumer. Consequently, the operating results of any of the subsidiary companies seldom reflect their true profits, that is, what their profits would have been in the absence of manipulation or other influences, and the accounts of the holding company and subsidiaries must be consolidated to afford a true view thereof. In the preparation of a consolidated statement of profit and loss, to show the correct sales, cost, etc., it is necessary to eliminate all inter-company transactions. For example, sales by one subsidiary to another must be eliminated from the sales of the former and the cost of the latter; and dividends or interest paid by a subsidiary to the parent company must be eliminated from the charges of the former and the credits of the latter.

Following is a consolidated balance-sheet of two companies, showing eliminations, which exemplifies the preparation of such statements under most conditions:

			Company	
ASSETS	Total	Eliminations	A	B
Property	$200,000			$200,000
Stock of company B		(1) $240,000	$240,000	
Cash	50,000		30,000	20,000
Accounts receivable.	100,000	(4) 50,000	50,000	100,000
Inventories	80,000			80,000
Total	$430,000	$290,000	$320,000	$400,000
LIABILITIES				
Accounts payable...	$ 70,000	(5) $ 50,000		$120,000
Capital stock (including $20,000 minority stock of company B)	320,000	(2) 180,000	$300,000	200,000

Profit and loss surplus (including $8,000 applicable to minority stock of company B).....	40,000	(3)	60,000	20,000	80,000
Total	$430,000		$290,000	$320,000	$400,000

The eliminations are explained as follows:

Stock of company B held by company A:

(1)	Book value, company A..........	$240,000
(2)	Par value	180,000
(3)	Excess of book value over par value, deductible from surplus.........	$ 60,000

Advance by A to B, $50,000, carried as:

(4) Account receivable, company A....

(5) Account payable, company B.......

Having made the above computations, the consolidated balance-sheet may be stated more concisely as follows:

Assets:

Property	$200,000
Cash	50,000
Accounting receivable	100,000
Inventories	80,000
Total	$430,000

Liabilities:

Accounts payable		$ 70,000
Minority stockholders of company B:		
Capital stock	$ 20,000	
Surplus	8,000	28,000
Equity of stockholders of company A:		
Capital stock	$300,000	
Surplus	32,000	332,000
Total		$430,000

When there are more than two companies, the procedure is the same. All inter-company balances should always be eliminated, but there are often exceptions in actual practice in case of uncleared current items the adjustment of which would unnecessarily interfere with the clerical routine. In these cases the smaller balance should be eliminated, leaving the remainder in accounts receivable or payable.

Bonds, etc.

In contradistinction to the investment by stockholders, a great deal of the permanent capital of corporations is borrowed, being evidenced by long-term bonds or notes. These obligations are usually secured by the property of the issuing company, but may be unsecured, as debentures and income bonds. In addition to long-term or funded debt, corporations frequently issue similar securities with earlier maturity to provide working capital.

Missouri corporations may issue bonds only with the consent of a majority of the capital stock outstanding, and the bonds issued must not exceed the authorized capital stock. They may issue stock in exchange for bonds outstanding by consent of two-thirds of the capital stock.

Bonds and long-term notes (they are essentially the same) may be sold at a discount or premium, depending upon the rate of interest, the security, condition of the money market at the time of sale, etc. However, the instances where bonds are issued at a premium are somewhat rare, owing largely to the fact that few issues bear a rate of interest higher than the effective rate demanded by investors, and also to the practice of underwriting by banks or syndicates, which usually exact a considerable remuneration.

In addition to loss sustained on account of discount on bonds, issuing companies frequently incur considerable expense in connection with the issue, for legal expenses, engraving, trustees' fees, etc. Also, unless the issue is under-written, there are usually commissions to bankers or brokers. All these expenses, together with the discount, constitute cost of the use of the capital in addition to the interest paid periodically, and should be charged against income accordingly; that is, discount and expense should be charged to a suspense account and amortized proportionally over the term of the bonds. When the entire issue of bonds matures at one time the amount of discount and expense to be

written off each fiscal period is ascertained by simply dividing the total by the number of fiscal periods in the life of the bonds; but when they mature serially or are subject to redemption through a sinking fund or otherwise, it is necessary to adjust the charges to income so that the unamortized balance will always correspond with the bonds outstanding. This is easily understood if it is kept constantly in mind that discount, etc., is in effect additional interest; and the amortization charges throughout the term of the bonds should always bear the same relation to the current interest charges. Assume, for illustration, a 6% bond issue of $100,000, dated January 1, 1918, maturing as follows:

January 1, 1923	$20,000
January 1, 1924	30,000
January 1, 1925	50,000

These bonds were sold at 97% and the expense incident to the issue was $780, a total discount and expense of $3,780. The apportionment will be shown by two methods:

(1) Based upon bonds outstanding:

$100,000 for 5 years	$500,000
80,000 for 1 year	80,000
50,000 for 1 year	50,000
Total	$630,000

First 5 years (1/5 each) 500/630 of $3,780	$3,000
Sixth year —80/630 of $3,780	480
Seventh year—50/630 of $3,780	300
Total discount, etc.	$3,780

(2) Based upon interest charges:

Interest to be paid:

First 5 years (on $100,000)	$30,000
Sixth year —(on $80,000)	4,800
Seventh year—(on $50,000)	3,000
Total	$37,800

Ratio of total discount, etc., to total interest	10%
First 5 years (1/5 each)	
—10% of $30,000......	$3,000
Sixth year ....—10% of $4,800......	480
Seventh year.....—10% of $3,000......	300
Total discount, etc................	$3,780

Thus it will be seen that when the date of redemption of the bonds is fixed—not necessarily as to specific bonds—the apportionment of discount and expense may be determined in advance. When, however, bonds are otherwise redeemed before maturity, it is necessary immediately to charge to profit and loss the unamortized proportion of discount and expense on such bonds. Bonds may not generally be redeemed before maturity unless so provided in the mortgage.

The treatment of premium on bond issues (from which should be deducted expenses) is precisely the opposite of the foregoing.

Many bonds are redeemable, under certain conditions, at a premium, and sometimes it can be foreseen with reasonable certainty that they will be. In such cases provision should be made for the payment of the premium by establishing a reserve, the contra charges against income being determined in the same manner as amortization of discount. Indeed, premium on redemption and discount on issue are different only in that the former is deferred.

Many bonds carry a provision to the effect that periodical payments shall be made by the issuing company into a sinking fund for the retirement of the bonds. These instalment payments may represent a certain proportion of the total amount of bonds issued (computed with or without regard to compound interest accretions) or may be based upon tonnage mined, feet of timber cut, etc. The fund may be invested in the company's bonds, or in other securities—if in the company's bonds, they may be kept alive (drawing interest) or may be canceled.

At whatever price a company's bonds are purchased for a sinking fund, if kept alive they should be carried at par, adjustment being made by crediting profit and loss for a discount and charging it for a premium, unless a reserve has been provided for the premium, as explained above. If interest is paid on

the company's bonds held in a sinking fund it should be credited to income or, preferably, the charge for interest should be reduced.

It is usual for the mortgage trustee to have the custody and control of sinking fund assets. The accounts representing those assets may be carried in the name of the trustee or otherwise, but, in the opinion of the writer, the best form is, for example: sinking fund for first mortgage bonds—cash; also,—bonds,—accrued interest, etc. The accounting is simple. When cash is paid to the trustee the cash account is charged; when he makes any investments, entries will be made, based upon his report, crediting cash and charging bonds (or whatever the investment may be); when he receives interest, if it has been accrued, charge cash and credit accrued interest. Whatever profit or loss there may be on account of sinking fund assets must be reflected in the profit and loss account.

Perhaps most of the sinking fund clauses in mortgages provide, evidently as an additional safeguard to the interest of the bondholders, that the sinking fund instalments must be paid out of earnings. Such a provision is illogical and should be ignored if possible. Bonds are invariably issued to pay for permanent capital assets. It being assumed that due provision is made for depreciation or depletion of the property during the life of the bonds, there should not be a double charge against income to pay for the property. There should only be a segregation of assets sufficient to liquidate the obligation at maturity. If amounts equivalent to the payments are charged against income they can only be credited to a reserve or appropriated surplus account, as the property should stand on the books at cost—less depreciation, as aforesaid. At the maturity of the bonds they will be liquidated by means of the sinking fund assets. The reserve will then be left intact, and, there being no further excuse for its existence as such, it becomes surplus, available for dividends. The effect or tendency is to deprive the stockholders of dividends during the life of the bonds to the advantage of the newer stockholders.

Whatever has been said regarding the fallacy of providing sinking fund reserves for redemption of bonds applies also to sinking fund reserves for retirement of preferred stock.

Bonds may be payable, principal and interest, to bearer or they may be registered as to principal only or as to interest as

well, and therefore be transferable only by assignment. Bonds registered as to interest are analogous to stock, i. e., the interest is paid by cheque to the holders of record; those registered as to principal only or not registered have interest coupons payable to bearer.

As to bearer bonds, the only records necessary to be kept, other than what may be required in connection with the income tax, are those relating to canceled coupons, as explained in the following. If any of the bonds are registered, the amount thereof should be shown by the general ledger, for the purpose of control. A detail record of registered bonds should be kept, showing the number, denomination, date issued, name and address of holder, name of the transferee and the number for which transferred. If the bonds are also registered as to interest, the record should provide for notation of the payment of interest for each semi-annual period. Sometimes these records are kept by the issuing companies, but more frequently by the trustees.

Interest in the form of coupons is almost invariably payable through the trustee under the mortgage. Some companies, in making the semi-annual payments, charge accrued interest and credit cash, thus treating the whole debt as discharged, but the preferred method is to charge the trustee with the cash in a coupon account. Then, as the trustee submits the coupons as vouchers, that account is credited and accrued interest charged. The canceled coupons are usually pasted in a book containing a sheet or section for each bond.

Receiverships and Trusteeships

In certain circumstances of financial embarrassment the management of a corporation may be committed by a court to one or more receivers; and if the corporation is adjudged bankrupt the creditors will elect one or more trustees who will take over the business, for the purpose of realization and liquidation.

As the receivers and trustees are fiduciaries in respect of both stockholders and creditors, and accountable to the court making or ratifying their appointment, they should exercise the utmost care in the keeping of their accounts. It is always preferable to open new general books for a receivership or trusteeship, but it is not considered necessary to open new books when receivers are succeeded by themselves as trustees.

In taking over the accounts, the capital stock and the surplus or deficit, as such, may be ignored by the fiduciary, the balancing account being the estate account, representing the book value of the assets, less liabilities, of the estate taken over. Except as may be prescribed by law, it matters little at what values the assets taken over are set up in the accounts of the fiduciary, as any profits or losses in realization will be credited or charged, respectively, to the estate account.

If the business is continued, even temporarily, by the fiduciary, separate accounts must be kept to show the results of his operations and any liabilities incurred by him. It frequently happens that a receiver turns failure into success and the business reverts to the stockholders.

In bankruptcy it is the duty of the trustees to realize on the assets for the benefit of, first, the creditors, and second, the stockholders. If any balance remains after all liabilities have been paid it is apportioned among the stockholders. On the other hand, if it is found that any stock has not been fully paid, either by reason of a discount having been granted (which is illegal) or of instalments being unpaid, the trustees can enforce payment of the balance. However, an original subscriber is not liable for the unpaid portion of his subscription if the stock was sold by him to a bona fide purchaser and the instalments due at the date of sale had been paid. As a rule, the liability of a stockholder is limited to the par value of his stock, but stockholders of national banks and of other financial institutions in some states are liable to the extent of twice the par value.

Missouri corporations, if insolvent, may voluntarily dissolve if authorized by a majority vote of the stockholders; they may if solvent by a two-thirds vote. However, the sale of the entire property requires unanimous consent of the stockholders. The president and directors become trustees to settle the affairs of a corporation in voluntary dissolution. There are no important accounting questions involved in the dissolution of corporations other than those mentioned above.

Miscellaneous Accounts Peculiar to Corporations

Most of the distinctive corporate accounts have been discussed but there are a few that have not been mentioned or that are worthy of elaboration.

In a sole proprietorship or partnership the capital investment is represented by one or more capital accounts, to which are transferred at the end of each fiscal period the balances of the profit and loss and drawing accounts. In a corporation, the original capital, capital stock, remains at the same figure and the accretion or diminution resulting from operations and withdrawals (dividends) is carried in one or more accounts variously called surplus, profit and loss, undivided profits, etc. In addition to these are various forms of appropriated surplus, that is, surplus set aside for a certain purpose and therefore not available for dividends—e. g., additions to property through income (or surplus), reserve for sinking fund, reserve for contingencies, etc. The interstate commerce commission, in its *Uniform Classification of Accounts for Steam Railroads,* treats provision for uncollectible accounts receivable as "appropriations of income" and includes the balance of the reserve in "appropriated surplus not specifically invested," but in the judgment of the writer there can be no net income or surplus to be appropriated unless due provision has been made for uncollectible accounts.

Many corporations, notably railroads, have an income account, as a clearing account for the various items comprising net income, the balance being transferred to profit and loss. The use of the terms profit and loss and surplus is very divergent, but when a surplus account is kept it usually represents the final surplus from operations for the period, charges for dividends and only such adjustments as affect the operations of prior periods or pertain to capital rather than to income—such as profits or losses on sales of plant property, fire losses, etc. The more general practice of commercial corporations, and probably the most satisfactory, is to have only a profit and loss account, to which is transferred the net income and to which dividends are charged and miscellaneous adjustments are applied.

Banks frequently sell their stock at a premium for the purpose of establishing a surplus, and some banks are required to set aside a portion of their earnings until a certain amount of surplus is established. In the latter case, the surplus should at least not be diminished, and in all such cases the surplus is looked upon as fixed. The free surplus of financial institutions is generally carried in an undivided profits account. Such institutions may from time to time, by resolution of the directors, set aside

a part of undivided profits as surplus, but such surplus may be utilized to offset losses sustained or may be paid out in dividends.

Mention has already been made of the desirability of not crediting to the general profit and loss or surplus account purely capital profits such as premium on sale of original stock issue, donated capital, appreciation of property, etc. These may be credited to separate accounts with appropriate titles or to capital surplus account—as distinguished from profit and loss or earned surplus.

On a balance-sheet the various accounts representing the stockholders' equity in the business may be shown separately, among the liabilities, as:

Capital stock	$1,000,000
Reserve for sinking fund..............	100,000
Profit and loss surplus................	400,000

or may be grouped under one heading—e. g.:

Excess of assets over liabilities, represented by proprietary accounts, as follows:	
Capital stock	$1,000,000
Reserve for sinking fund..............	100,000
Profit and loss surplus................	400,000
Total..................	$1,500,000

It would seem that this latter, or some such arrangement, is especially desirable when the capital stock has no par value. If there is a deficit in the profit and loss account it may be shown under the assets or may be deducted from the capital stock.

The appropriated surplus account "additions to property through income" represents the cost of additions and betterments to capital assets which was charged against income as expense and subsequently capitalized without crediting income. This is an evidence of ultra-conservatism, but there can be no objection to the practice as long as there is no effort at concealment.

An important class of intangible assets that has not been mentioned is franchises. From an accounting point of view there is little distinction between a franchise and goodwill, except that the former frequently has a definite limit of time beyond which

it is valueless if not renewed. If such is the case, provision should be made for the amortization of the asset so that the book value will be extinguished at the termination of the period. Much has been said and written regarding the value of a municipal franchise granting a monopoly to a public service corporation. Such a franchise is valuable only to the extent that it furnishes a basis for earning power in excess of the tangible property and the intangible assets, such as the value of the organization or system; and its value is subject to change due to increases and decreases in operating costs (the revenues per unit being nearly always fixed) and to the growth of the city in population and area. It would be impracticable to give expression in the accounts to the true value of a franchise of this character.

Procedure In a Bank Audit

By F. Thulin, C.P.A.

The average public accountant has very little to do with bank accounting in the installation of banking systems. He has somewhat more to do with the bank audit, but not as much as his function legitimately entitles him to. Heretofore the bank audit has been conducted by a state, federal, clearing house or internal examiner with varying degrees of thoroughness and certainty—in many instances, without any clear, well-defined standards of auditing procedure.

There is a tendency, very subdued it is true, whereby the offices of practising accountants, particularly those certified from leading states, are being recognized by the banking fraternity as having potential value for the banker. Some of the leading accounting firms of the country, therefore, are making a bid for this form of business and, the writer understands, not without some degree of success. This tendency is given impetus by the increasing recognition of the accountancy profession by the federal reserve board.

While considerable has been written on the subject of bank auditing, the method of treatment has been somewhat unsatisfactory in that the detailed procedure was not noted and furthermore certain principles were not brought out as effectively as they should be.

The bank audit should cover four primary questions, to wit:

1. Is the institution solvent?
2. Is the institution being defrauded by any of its employees or officers?
3. Is the institution obeying the law?
4. Is the policy of the institution a sound one?

The Solvency of the Bank and the Honesty of its Employees and Officers

To determine the question of the bank's solvency and of the honesty of the employees of the institution, the first procedure on the part of an auditor is to verify the balance-sheet of the bank.

The balance-sheet of a bank, as any other balance-sheet, is the summary of the assets and liabilities. In a verification of the

documentary or physical assets of the balance-sheet, the points of inquiry which should be foremost in the auditor's mind are:

1. Are there any inclusions in the assets, good in themselves, which do not rightfully belong there, such as items not duly credited, items charged up to the proper account but doing double duty, etc.?
2. Are there any inclusions in the assets which are not of any value, such as fictitious items or items of no credit worth, etc.?

The book assets belonging to the bank are governed by other considerations to be noted.

First Steps of an Audit

The examination of a bank ordinarily begins with the auditor's assuming control of the tangible assets. This control is usually exercised by his affixing his seals to the vaults, safes, boxes and other receptacles containing the tangible assets of the bank. If these tangible or documentary assets are needed from time to time by the officers and employees of the bank to transact the bank's ordinary business, the auditor makes due note of such items, in a memo. form or on the bank record.

Audit of Cash

The first asset item verified is cash. As the counting of the cash is merely mechanical, some auditors or their assistants do not count every bill, but count merely the packages containing bills of $5 or of a larger denomination. The $1 and $2 bills are usually put up in $50 and $100 packages. An experienced handler of money can tell whether or not the package contains approximately the amount noted on the back. It is, however, advisable to count a package here and there, in order to catch any systematic shortcounting in the packages.

The silver coin, if in considerable quantities, can be weighed instead of counted. As the coin is ordinarily put up in sacks containing $500, the weighing process is sufficient, though it might be well to open the bags to ascertain whether or not they actually contain silver and do not contain iron washers, etc.

The coin represented by the baser metals, such as copper and nickel, are usually put up in sacks or in coin wrappers. As a rule, the auditor accepts the count without opening the sacks or coin wrappers. If the silver is carried in coin wrappers, the auditor

ordinarily does not open the packages. If there is any cause for suspicion, it might be advisable to open the packages occasionally in order to ascertain whether or not they actually contain money.

The gold coin should be counted, if practicable, as in this way the short weight coins will be brought to light. The gold coin of a bank may be light weight, and allowance should be made for the loss due to abrasion, if the item is considerable. The gold bullion of a bank should be weighed and should correspond to the unit of measurement of the United States government—23.3 grains per dollar. Except in the large banks, the verification of the gold coin or bullion is not a difficult task.

The total of the cash, as gathered from the tellers' cash, and the reserve cash should equal the total of the cash carried on the general books. If there is a shortage and it is unexplained, the deficit must be traced and properly accounted for. A deficit unaccounted for does not necessarily indicate dishonesty, but it does indicate a diminution of the assets, and the carrying value of the asset must be correspondingly reduced.

In an examination of the cash of a bank, the very character of the asset being examined makes it unnecessary to take into consideration the questions of fictitious or valueless inclusions, except in the case of counterfeits.

Audit of Clearing House Exchanges

The exchanges for the clearing house, after the bunch totals have been taken, should have attached to every package a verification slip. These slips are signed and returned direct to the auditor when the banks on which the cheques are drawn receive them. The bunch totals correspond to the total carried on the books. The auditor, however, should not rest content when the verification slips are returned duly signed. The important element in the verification of the clearing house items is the condition of the clearing house returns and report. The returned items and report may reveal

1. Items which are fictitious and deliberately executed to cover a shortage. These items are uncovered by being traced to the originating credit.
2. Items which are valueless, but genuine, and should be charged to profit and loss.

3. Items deliberately charged into clearing house exchanges which have already been charged to other sources—for instance, a cheque which has been charged back to a customer and put through the clearing house again without a corresponding credit, but has been used to cover up temporarily a deficit or an abstraction by the teller. An item cannot do double duty.
4. Cheques returned in the clearings that seemingly have been missorted, and are in fact drawn on the bank being audited, should be given a careful scrutiny to make certain that they have not already been charged to the individual or country bank books. In most institutions it is comparatively easy to procure an uncanceled cheque that has been run through the books but has not yet been canceled and sorted with the other canceled cheques of the customer.
5. Items which have never been credited to an account—for instance, a cheque received and put through and no credit given the customer.
6. Forced footings or other clerical or intentional inaccuracies.

Audit of Cash Items

The same six general principles which pertain to the auditing of clearing house returns apply to the auditing of the cash items.

Items due in the future should be examined to make certain that credit has already been given to a customer. Usually the amount so carried is small and will cover only a temporary petty theft or dishonesty. If, however, the amount is small and undetected, it may make the offender bolder in the future; therefore, failure to detect the practice may incur a future danger.

Audit of Outstanding Transit

The records designating the transit items outstanding for collection are totaled and compared with the total carried on the general books.

The verification of the outstanding items can be made by checking the remittances for a certain period of time after the audit and then sending verification notices on the unpaid outstanding items; or verification blanks can be sent out at once to the banks to which the items had been sent for collection. The

latter is the preferable way. The returned items should be scrutinized with the same six general principles in mind which obtained in scrutinizing the returned clearing house items and cash items. The old outstanding items should be scrutinized as to the offsetting credit origination and the reason for their being unpaid should be ascertained. It may well be that the item should be charged to profit and loss or is fictitious.

Audit of Amounts Due from Banks

The amounts due from banks are verified by totaling the balances and requesting statements from the various banks. Any discrepancy is brought to light by checking the statements against the books of the bank being examined. Items which have been charged to banks with which an account is kept and which have not been credited should be verified in order to ascertain whether or not they have been received.

The advices of payment are examined, and the returned items are given the same careful attention which is given the returned items of the clearing house exchanges and outstanding transit.

Where the drafts issued against a bank are credited to the account, as is the practice in most institutions, the draft register should be scrutinized. Any draft numbers recorded as being canceled or unused should be sustained by a canceled or spoiled voucher. The supposed spoiled or canceled voucher may actually cover an issued draft, the purchase price of which is covering a temporary shortage.

Old drafts which have recently been marked off should be checked against the statement of the charge made by the correspondent bank. If any suspicion is entertained that the accounts have been tampered with, all the paid drafts should be checked against the statements rendered or vouchers returned. This is the only accurate method of uncovering items falsely marked off as paid.

The question of further precautions to be taken with the issuance of drafts is noted in subsequent pages.

Audit of Investments

In the audit of the bank's investments, the important item to note is that the securities correspond with the description and number carried on the bank's record. By carefully comparing the

name and number, the auditor can detect any temporary substitution of securities. It may be well, in some instances, particularly in regard to new investment purchases, to trace the purchase in order to ascertain whether or not it is an actual purchase and not merely a substitution.

If any securities are held by the United States or state authorities, or by a correspondent bank for safe-keeping, or as collateral to a loan, the verification of such fact, together with numbers and descriptions, should be procured from the correspondent bank.

The auditor's attention in a general way should be directed toward the market value of the securities. A temporary drop in the market should not and need not be written off, but if a drop in the market price has been continued for some time, a writing-off of the securities to correspond to the market price is justified. Any security on which default has taken place and which is being liquidated through receivership or foreclosure proceedings is not properly carried in the active assets, but is carried in a separate designation or is written off. Investment holdings in companies in which some officer, director or stockholder is interested should also be given careful scrutiny, as an undue amount of favoritism has proved the undoing of many an otherwise sound bank.

The auditor should discourage any paper profits on the books —that is, profits made on securities which have not been sold. It is a fundamental accounting principle that a profit is not made until the security is disposed of. The factors which raised the price in one instance may also reduce it in another instance. With the federal taxes in force there is not much danger of this practice being prevalent.

Audit of Loans and Discounts

The audit of the loans and discounts in some respects resembles the audit of the cash items—that is to say, the auditor, in addition to verifying the clerical accuracy of the items and verifying the discount register and also the customers' liability ledger, should further ascertain:

1. Are the instruments genuine and proper obligations, if firm obligations?

In most instances, this inquiry is out of the question in regard to all the instruments on hand. But the signatures of instruments over a certain amount should be verified to ascertain whether or

not they are genuine. If a direct obligation of a customer, the genuineness of the signature on the instrument often can be verified by comparing it with the signature card used for paying cheques; by comparing it with a cheque filed with the current canceled vouchers; or, better still, by communicating direct with the obligor. If discounted by a customer the genuineness of the indorsement can be ascertained in the same way. A tracing-down of the corresponding credit which was made when the loan represented by the instrument was made is ordinarily prima facie verification. This would be particularly true if the credit were a cashier's cheque or draft which had been canceled and paid and could be inspected. This method, however, is not infallible. Instruments purchased in the open market can be verified as to genuineness by communicating with the obligors, primary or secondary.

The instruments of corporations, etc., should be scrutinized to ascertain whether or not the agent has authority, and furthermore, if any indorsements are ultra vires.

While the genuineness of the smaller items in loans and discounts cannot conveniently be investigated, a verification of instruments here and there will have a salutary effect on the management. Obviously, the auditor should see that the instruments are properly indorsed so as to pass title.

2. Are the instruments paid?

Matured unpaid instruments, in addition to being carefully scrutinized as to their genuineness and propriety, should be examined to see if they are in fact unpaid. These facts can be brought to light only by communicating with the makers or with the customer who discounted the item. As part payments on unmatured instruments are seldom made, it will be extremely difficult to check up any payment not recorded. The verification of genuineness from the maker will ordinarily disclose a part payment which has been made and which has not been recorded. The omission of part payments in the entries of a bank arises most frequently in the case of demand instruments. A verification of genuineness from the maker or customer will, however, disclose this fact also. An examination of the last interest charge will, in a measure, also do this, particularly when the audit is made soon after the last of the month.

3. Are the instruments doing further double duty?

Sometimes instruments which appear in loans and discounts are genuine, unmatured and unpaid, but no credit has ever been given to anyone, nor has any asset been expended to procure the instrument. If any instrument has a suspicious tinge, the original credit given should be traced. Many instruments which can be thus used temporarily come into the custody of the bank—for instance, notes sent in for collection. A verification of credit given for all loans made within a few days preceding the audit may, in some cases, be desirable. This verification can be quickly made from the discount register.

4. The credit of the instruments.

Whether or not the instruments are signed by persons or firms that show the loans and discounts are good credit risks is not primarily a question for the auditor, particularly if he be an outside auditor. The federal, state or clearing house examiners, however, are given more leeway. This statement is not intended to convey the idea that a federal, state or clearing house examiner assumes the inquisitional attitude of a credit-man, or to state that because he does not approve of such a loan it shall be written off the assets or the exceptionable character noted.

The auditor cannot very well make any remarks about the twilight zone of credit worth in regard to loans held by a bank, for he would be usurping the discretionary powers of the officers or directors of a bank. But the credit status of a particular instrument in the loans and discounts can be so flagrant that the auditor is in duty bound to make note of it. An auditor who is to any degree familiar with the local credit situation will soon be able to note the cases to which exception should be taken. In any event, the credit status of instruments over a certain amount should be weighed.

Obligations signed by officers, directors or stockholders, or obligations of corporations in which such persons are interested, deserve special attention from the auditor in his examination and report. Favoritism not based on true credit worth should be frowned on. If flagrant, the auditor should take vigorous exception.

Overdue instruments, particularly if long overdue, should be charged to undivided profits or surplus. Such instruments should

not be carried as current, but should be at least segregated to a special asset account.

In an examination of the credit standing of the instruments held in the loans and discounts account, the collateral which may have been deposited as security is examined. And, in a general way, the market price, character and genuineness of the collateral are taken into consideration. Where the collateral is kept with the note, the examination sometimes is comparatively simple—merely a comparison of the collateral with the collateral recited on the instrument. Any variation can be accounted for by an examination of the receipt given by the customer and of the numbered collateral receipt book, which, by the way, every bank should have. It is the custom in many institutions not to issue receipts. It is the writer's conclusion, however, that this practice is not desirable. The customer should sign a receipt or return a receipt given, which, in turn, is pasted on the stub of the receipt book. The receipt book is particularly desirable where a separate record is kept of the collateral, as it is in effect a double check on the collateral securities. Where it is desirable outstanding stubs or carbons can be checked back against the loans and against the collateral record. Any collateral given back, and, through neglect, not marked off the record, can easily be checked to the receipt book. The collateral on deposit can, of course, be verified by communicating with the maker of the instrument under consideration, and such verification is often desirable.

Where the borrowers are stock-brokers, whose collateral is changing often, the receipt book noted in the foregoing paragraph need not be used. The collateral should be verified by communication with the broker.

The general practice in collateral auditing could be made somewhat stricter. As there is an opportunity for manipulation, it is submitted that the collateral held by a bank is deserving of attention, although the item does not appear on the bank statement. The bank is liable for the securities and, therefore, should keep a record by which it is possible, when the institution is audited, to effect a fair tracing and checking-up without necessarily communicating with the customers or checking up with the notes. This can generally be accomplished by means of a numerical receipt book.

The true conception of collateral is that it is a liability and is governed by the same general principles of liability as individual deposits.

Miscellaneous Instruments and Securities

Somewhat analogous to the audit of collateral is the question of the audit of items held for safe-keeping. While it is deemed sufficient in practice to check back these items against the book record, the receipt record as noted in the foregoing paragraph should be used. If any dôubt exists, the receipt record can be checked against the book record. Usually this is not done.

The audit of securities kept in trust is made in the same general way as the audit of securities kept for safe-keeping. The check against the book record is usually deemed sufficient. But if any suspicion exists, the securities and other property should be checked against the instruments creating the trust, and if any securities have been taken out, sold or matured and paid the proceeds should be followed. Receipts or vouchers should be examined and checked against trust disbursements. Escrows are handled the same way.

Collections Outstanding

The outstanding collections appearing on the city collection or other collection register are usually checked back. It is also desirable to test the larger items marked "paid" to determine whether or not credit has actually been given. The larger items marked "returned" might also be verified.

The outstanding items sent out of town are not usually verified, but there is no hard and fast rule on this point.

Audit of Liabilities

In the foregoing discussion the debit side of the balance-sheet was analyzed.

The audit of the credit side of the balance-sheet concerns itself with two classes of liabilities: (1) The creditor liability and (2) the capital liability and the accounts that go to make up surplus or some division of the capital liability.

The chief point in the audit of creditor liability is to unearth any outstanding liabilities not disclosed on the books. In consid-

ering assets, this inquiry is in the opposite direction. The asset gives, in itself, a clue to its worth. The liability, however, does not appear, but must be unearthed, usually with only a slight clue.

Audit of Individual Deposits

The first item usually taken into consideration in the audit of the creditor liability is individual deposits.

If statements were sent to all the bank's customers represented in individual deposits—which, by the way, is seldom done—such a verification would not tell the whole tale, although it would be sufficient to cover the items appearing on the books. An investigation, to be thorough, would be carried still farther.

It is readily perceived that an account which has been fictitiously charged off entirely to cover a deficit would not be covered by this kind of investigation. An auditor, therefore, should examine all the closed accounts, the large ones particularly.

The question is more difficult if the depositor liability has never appeared on the individual books. But as most banks keep a record of new accounts opened from time to time, and made separately from the tellers' record, such a record may disclose a deposit which has not been entered but is used to cover a deficit. If, however, the subordinate data cannot be procured, the non-recording cannot be brought to light.

The auditor does not, as has been previously noted, send out statements, except here and there, to the depositors listed in the individual deposits. The ledgers are footed and compared with the general books. Any changes in accounts which fluctuate very little are noted, as such accounts are usually selected for manipulation. Old accounts which have been closed out should also come in for scrutiny.

Another method by which an overlapping, etc., can be disclosed is to examine the larger cheques sent out, of which the indorsement record is kept by the bank. If the instrument is traced to the credit entry, frequently the omitted credit is uncovered. This uncovering cannot be done in the case of a cash deposit or of a deposit having a clearing house cheque on which no record of the indorsement is kept.

Many institutions have an account known as "unclaimed balances." This account is composed of tail-end customers' balances and ordinarily does not amount to any considerable sum. The

mathematical verification of the outstanding balances is usually deemed sufficient. If the account shows unusual activity in the withdrawals, such activity should be investigated. It may be desirable in some instances to trace the entries from the individual ledgers to unclaimed balances.

Audit of Country Bank Deposits

In an examination of country bank deposits, the auditor verifies the clerical accuracy of the total book balances in order to ascertain whether or not they correspond with the general books. He also goes further and procures verifications from the customer banks. This is practicable in this instance, as no undue alarm is caused and the request is not misunderstood. In the case of any other kind of customer, the general sending-out of verification slips might not be understood and might be embarrassing to an institution.

The verification would not, of course, bring to light inactive accounts which had been closed out to cover a deficit or accounts which had been opened but had never appeared on the books of the bank. The same general principles noted in considering the individual deposits are applicable in considering the disclosing of liabilities pertaining to country bank deposits.

Audit of Savings Deposits

It is a physical impossibility to verify the savings accounts of an institution by communicating with the customers, and most auditors content themselves with a clerical verification of the books. A careful auditor should, however, go farther. Charges over a certain sum which have been made to somewhat old accounts should be verified as to amount and particularly as to the signature. The signature should be traced beyond the signature card, in case of doubt, as in many instances it is comparatively simple to substitute a signature card which corresponds with the signature on a withdrawal cheque.

Audit of Outstanding Instruments, Cashier's Cheques, Certificates of Deposit, Dividend Cheques, Etc.

The first step in the audit of outstanding instruments, cashier's cheques, certificates of deposit, dividend cheques, etc., is to total the outstanding instruments. The total outstanding should agree with the total carried on the general books.

At this point the audit is only partly complete, but in practice it usually stops here if there are no suspicious circumstances. If there is any reason for suspicion, the audit should be carried further.

A defalcation or a deficit can be covered by the suppression of a liability. Marking an outstanding instrument "paid" will accomplish this, although the marking-off is unsupported by the canceled instrument.

The paid entries, particularly of items outstanding for some time should be carefully scrutinized and the supporting vouchers examined. A supporting voucher in turn should be thoroughly examined, as it may be that the instrument has been substituted and the genuine one is still outstanding.

Some institutions pursue the vicious practice of numbering instruments of the foregoing kind by long hand or by a machine operated in the bank, instead of by heavy printing done by outside printers. Where the former system obtains, the paid instrument is not necessarily the original. Where the latter system obtains, every paid instrument will show its original character.

By a system of numbering properly the instruments issued by a bank, some recording of an instrument must be made, although the amount is not necessarily the correct one. Instruments recorded as having been canceled, spoiled or for any reason unused should be supported by the canceled or spoiled instruments. No instrument corresponding in number with a spoiled one should be issued.

If it becomes necessary for the auditor to check back the paid items, the task is not so difficult. In fact, it is almost as convenient to do so as it is to check the outstanding instruments. To guard against the possibility of an old date, prior to the period covered by the audit, having been used in marking off an item or of some change having been made in the recording on the register, the outstanding cheque list of some preceding reconcilement should also be examined and checked back. If the instruments supporting the paid entries are numbered as suggested, the auditor has done everything that can be done to disclose the liability of the bank. If the same auditor is employed periodically, the system will, in 99 per cent. of the cases, unearth any defalcation.

A defalcation of the foregoing nature can be guarded against by a system of internal check—no teller being charged with the

duty of marking off the canceled instruments or verifying the total of the outstanding instruments. It is possible, however, for a teller to short-foot his cashier's cheques figures in his settlement and clandestinely to mark "paid" any instrument which had been outstanding for so long a time as to preclude the probability of its being presented in the future. The last cheque or other instrument issued for the day of the audit should be compared with the numerical record to see that there is no gap.

The auditor, however, has done his duty if he has verified the instruments supporting the payment of items over a certain sum and, furthermore, if he has called attention to the desirability of a correct numbering system for the instruments issued by the bank.

The verification of the liability on certified cheques is made in much the same manner as that of the liability on other outstanding instruments.

It is more difficult to obtain a verification of the payment of old outstanding certified cheques, as the bank does not, of course, retain possession of these vouchers, but returns them to the customers. The payment can be verified by communicating with the customer if there is any doubt as to the legitimacy of a paid entry. The certification of the outstanding cheques should be compared with the account charged to see if there was a sufficient balance when certified. The paid certified cheques can be subjected to a like scrutiny here and there. Any notes signed by a bank and not recorded can usually be brought to light by an inquiry addressed to the banks with which the bank being examined keeps its accounts or does business. Ordinarily such a liability is secured and is hard to keep under cover. Paid entries should be supported by the canceled instruments. Bank acceptances executed by the bank are liabilities. Paid entries should likewise be supported by the canceled instruments.

Audit of Capital Stock

In the audit of the capital stock no particular problem different from the ordinary audit is present in the bank audit. The outstanding stubs on the stock certificate book should agree with the amounts carried on the general books. Stubs marked "canceled" or "spoiled" should be supported by canceled or spoiled certificates. The auditor should be particularly careful that a good system of numbering the certificates is present and that they are

not numbered by hand. It is possible for an officer of a bank falsely to issue a certificate for a certain number of shares and to make the stub entry conform so as to balance with the general books, but it is not probable. The supporting canceled attached certificates in some instances may be compared with the stubs to which they are attached to ascertain whether or not they agree.

The stock of a bank in most instances is not countersigned by a registrar. Therefore, such outside protection is not present to lessen the auditor's duty. The outstanding stub in the certificate book should balance with the stockholders' ledger.

Audit of Surplus

The audit of the surplus presents no difficulty, but it is desirable to examine items charged therein to make certain that no overcharge has taken place. Sometimes a larger amount is charged than is necessary, the difference going to some private pocket. A charge, however, properly belongs to undivided profits before finding its way into surplus. Charges to surplus should be followed to their corresponding credits and vice versa.

Audit of Undivided Profits

Undivided profits account is peculiar to banking, but is in reality a surplus account. The chief office of the undivided profits account is to equalize the dividend rate and at the same time not to interfere with the surplus account and its semi-rigidity.

The charge to undivided profits, bad debts, etc., should be traced to its source to ascertain if an overcharge has been made. Other charges should be traced to the corresponding credits.

In the overwhelming majority of cases, the surplus and the undivided profits present no difficulty to the auditor.

Audit of Revenue Accounts Which Are Assembled in the Profit and Loss Account

The revenue accounts of a bank from the debit aspect generally consist of the following items:

Interest Paid—The interest paid is usually on the savings deposits, on individual deposits under certain conditions and on country bank deposits under certain conditions. There are, furthermore, interest items paid on certificates of deposits and on margins. An auditor cannot check back every interest item to make certain that everything is correct, but he can examine the

account minutely enough to break up and uncover a systematic looting through the medium of the interest account. The interest items paid on certificates of deposit can easily be verified by checking back the paid certificates with the entries in the account. The checking need only be done here and there if the amount of work is too great.

Interest items on the savings bank deposits usually are computed twice a year. The point to guard against in this matter is to make certain that no excessive interest item is entered on the list and credited to the account at the correct interest computation, the difference being appropriated by the teller or other defaulting clerk.

Checking-up some of the larger items of interest on the list will uncover any system of such milking of the bank's revenue.

The deliberate over-footing of the interest total is easily detected by a comparison with the credits on the teller's blotter. Such a method of falsification is extremely crude.

An auditor has done his duty if he verifies the interest totals and checks back the larger interest entries in the savings ledgers.

The monthly interest paid on individual and country bank deposits affords a more favorable opportunity for manipulation, as the intervals admit of systematic plundering.

There have been some instances of large amounts abstracted in these charges. The amounts every month were not large enough to arouse suspicion when compared with those of a preceding month, but in a few years the sums were exceedingly large. An examination of the interest charges at quarterly intervals will uncover systematic looting. An auditor should, therefore, verify the credit totals of the interest charge, as any over-footing of the charge will then be discovered. But a subsequent juggling with an excessive entry of an interest charge in order to bring about a reduction to the correct amount cannot very well be uncovered unless by accident. The statement sent to the customer can easily be altered to indicate that interest has been credited at the correct amount. The charge ticket to the account can easily be withheld from the vouchers returned to the customer.

In some institutions the interest credit is made prior to the end of the month. If an auditor has an opportunity he should examine the interest credits on the statements to ascertain whether or not the credits correspond to the items on the interest charge.

The credits represented by drafts or cashier's cheques requisitions should come in for a careful scrutiny, particularly if the account named in the requisition is receiving its credit for interest by a credit entry in its account. It may well be that the draft or cheque requisitioned was used for personal purposes. In a recent defalcation this was the method which had been successfully used for some years.

Exchange Paid—Any peculations in the exchange accounts are likely to be of very small amounts. In the larger banks the debit exchange is composed primarily of charges made in the collection of outstanding transit items. In most instances, checking this item in these institutions is out of the question and a comparison of the monthly charges is about all that can well be done.

Where the transit department does not handle any cash, such a check is ordinarily ample, as there is not a great opportunity to steal.

Interest Collected—Where the interest collected from bond investments is segregated and an account is kept with each kind of investment, the verification of bond interest is comparatively easy. An examination of the security record will make possible a quick auditing of this item. While in the ordinary bank examination the bond interest account is not verified, practically such a course is often desirable. There are many opportunities present for the perpetration of fraud. In large institutions operating investment departments, the verification will obviously be somewhat detailed, because of the constant changes entailed by purchase and selling of securities. In principle it is better to designate bond interest separately on the general books.

Verification of the interest collected on the loans and discounts presents a task too detailed and drawn out for a complete check to uncover interest paid but not credited to the interest account. A check on interest items here and there is not sufficient, because it is unlikely that the desired item will be uncovered. The difficulty in this case is that the individual abstractions are in themselves comparatively small, but, if made systematically, the sum is considerable when the peculations continue over a period of years. The interest verification with the discount register covering a period of two weeks or a month will, however, probably uncover any systematic milking of the interest account.

Exchange Collected—In a general way the exchange account resembles the interest account. The same general remarks in regard to verifications hold true except that the verification is seldom made, because the detailed work is so involved. As a practical matter, in a large bank it is not necessary. The amounts which can be abstracted are so small that they will not affect the result one way or another. In a smaller bank the exchange account may be verified for some weekly period prior to the audit with the deposit tickets showing transit items. Beyond this point an auditor cannot very well go.

Expense—The system of a bank should provide for the proper approval, by some officer, of every expense ticket and for a filing system by which the charge tickets will be in one place and readily accessible when an examination is made. Every ticket should be explicit as to the expense item covered.

The average bank payroll is made up by some one officer who makes out the expense ticket, procures the cash from the tellers and fills up the pay envelopes. If such a system is in vogue and the institution is a large one, the auditor should recommend that two officers or authorized individuals work on the payroll. If the bank is a small one, the various amounts appearing on the payroll might be verified by inquiring of the individuals named on the payroll.

Compliance With the Banking Laws

The banking laws, state or national, ordinarily are directed to the following lines of inquiry:

1. The character of the loans made, which is subdivided into the following:

a. The amount of a loan which a bank can make to an individual, corporation, etc. This is usually limited to a certain percentage of the capital and varies with the laws of each state; consequently, each state and federal law should be examined.

b. The collateral security which can be used. Where this limitation is present, it usually involves a prohibition against the stock of the bank lending the money and also against real estate as security. The various state laws and the federal laws should also be examined on this point.

c. The persons to whom the loans are made. Usually the legal provision, if any, is leveled against loans made to the bank's officers or directors.

d. The time for which a loan can be made. This provision, if present as a legal prohibition, is to insure liquidity of investments. The auditor should be familiar with the state laws on the point.

2. The amount and character of reserve a bank should carry against its deposits. This is regulated by state statutes and the federal reserve act. The auditor should be familiar with the legal rules, state and federal, on the point.

3. Miscellaneous provisions. The auditor, in general, should be familiar with the state laws in regard to the institution.

Collateral Inquiries

There are some important collateral questions of which an auditor should take careful note:

1. The composition of the board of directors and the regularity of attention given to the bank's business. An examination of the minutes of the board of directors will bring this information to light. If the information brought out shows flagrant disregard of duty or unfitness for the duty, an auditor can make a judicious reference thereto in his report. Loans, particularly large ones, should be approved by the board or a board committee. It is not desirable, nor at times allowable, to delegate this power to one officer.

2. The by-laws. Any rules prescribed for the conducting of the bank's business should be investigated to ascertain whether or not they are being complied with. Disobedience of any salutary by-law can be vigorously noted in a report.

3. The system of internal check. An auditor has done his duty in most respects when he has pointed out a system whereby a defalcation will necessitate the coöperation of two or more employees. Where such a system obtains, the danger to a bank is reduced to a minimum. There are, however, many kinds of defalcation which the internal check will not disclose. In no event should a teller have access to the bank ledgers; nor should a reconciliation of an account be made by the clerk who makes the original

entry on the books. Debit tickets to the various accounts, individual, country bank or general, should be approved by some authorized department head. If a bank has a separate record for collateral, the clerk who records ordinarily should not also receive and give back the collateral.

The securities held by a bank in its own right, or as collateral, or for safe-keeping, etc., should, wherever possible, be drawn out in the presence of another person. Many auditors are careless on this point, but in a well-regulated institution all securities are taken out by two employees.

An internal check system also includes a due consideration of the signature cards of the bank. It is not desirable to allow too free an access to the signature cards as there is possibility of a substitution of signatures.

The Report

The auditor's report, except by federal and state bank examiners, has no set form.

The report should be complete, stating what was done in the audit and the condition of assets and liabilities.

Considerable leeway can be given an auditor, but a good report will show more or less:

1. An analysis of loans and discounts as to some division of

a. Amounts—for instance, a division having therein the number of loans under 5000
between 5000 and 10000
10000 and 20000

b. Character of security.
one name paper
two name paper
collateral secured paper,
and furthermore a division into kinds of collateral stocks, bonds, etc.

c. Character of borrowers, viz:
officers, employees and directors and whether or not secured
corporations
individuals
partnerships

d. Maturity, viz:
demand notes
time notes
overdue notes

2. An analysis of deposits as to

a. Amounts—for instance, a division of the accounts showing the number of savings accounts, certificates and commercial accounts under 5000
between 5000 and 10000
10000 and 15000

b. Character of deposits
individual accounts
corporation accounts
public accounts

3. A statement of the application of funds and comparative statements of condition between audits.

4. Condition of the real estate title, although this is also noted in describing the steps taken in the audit.

5. The items, if of any consequence, held as cash items, with comment if necessary.

6. A detailed list of overdrafts and a statement that it was verified with officers' reports.

7. The bonding of the proper employees and officers.

8. General recommendation concerning systems and methods of recording or other desirable practices.

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EDITORIAL

Exemption For Accountants

The expected has come to pass, and the government is beginning to recognize the necessity for some sort of conservation of the accounting ability of the country.

Newspapers during the past week carried a dispatch from Washington indicating that the treasury department at least has awakened to the facts. We quote the dispatch as it appeared in the *New York Tribune* of August 19th. It appeared in practically the same form in most of the prominent papers:

ASKS EXEMPTION FOR EXPERT ACCOUNTANTS

WASHINGTON, Aug. 18.—Expert accountants have become so essential to the war-time programme of tax collections that the government is considering some step to prevent their being taken for army service and to enroll them in a big volunteer reserve similar to that being established for physicians.

There are only about 2,500 certified public accountants and 5,000 junior accountants in the United States. Internal Revenue Commissioner Roper's programme for collecting $8,000,000,000 of taxes next year calls for employing more than 1,000 of these in government service.

At present this number is not available, particularly in view of the government rate of pay and the fact that nearly every corporation in the country is advertising for additional accountants to facilitate industrial expansions and calculate heavy federal taxes. This situation has been accentuated recently by the drafting of hundreds of expert accountants and their assistants to service which does not take advantage of their expert knowledge.

The treasury has suggested to President Wilson that accountants be recognized as a class essential to the war, like physicians, dentists and chemists, and that they not only be exempt from draft, but that some plan be worked out to discourage their voluntary enlistment and to recognize their value in civilian service.

From the beginning of the war the American Institute of Accountants has resolutely set its face against anything which could be interpreted as an effort to procure exemption from the military draft for persons engaged in public accounting. The institute has expressed the opinion that nothing should be done

to prevent the drafting into the military service of every able bodied man within the draft ages.

In adopting this attitude the institute has, no doubt, to some extent been influenced by the splendid spirit of patriotism shown by the accountants of Great Britain and her colonies. No profession has yielded a larger percentage of its men to the fighting forces, and it seemed altogether desirable that the accountants of America should not be behind their British brethren.

The experience of Great Britain, however, is being further felt in this country. There it has been found necessary to place public accounting among the so-called "certified occupations." This phrase applies to those branches of professional and business activity which are indispensable to the conduct of the war.

The British rule provides that members of certain recognized organizations of accountants, over 31 if married, or over 35 if unmarried, are exempt from military service, and the same rule applies to all accountants' clerks of ten years' standing.

Great Britain has sent into the field a far higher percentage of man-power than this country will ever be called upon to yield. With a smaller population and a longer participation in the war the demands upon the manhood of Great Britain and her possessions have been tremendous. In the United States, with a vast population and delay of nearly three years in entering into the war it will not, in all human probability, be necessary to make anything like such great inroads on the man-power of the country.

It might seem, therefore, that the necessity for exempting accountants would be less here than in Great Britain; but that is not the case. Accounting is an older profession in Great Britain and its number of practitioners actually far greater than in this country. Various societies of accountants in the British Isles and in the colonies have attracted numbers of young men into accountancy, and the status of the profession has been thoroughly established for some years.

In America, however, the accounting profession has been confronted by considerable difficulties in its growth, and it is only within the last ten or fifteen years that it has obtained anything like the recognition to which it is entitled. Since the war began, of course, there has been an inescapable demand upon accountants, and today no business man could probably be found who would deny the importance of accountancy.

For some time the American Institute of Accountants has been seriously concerned as to the possibility of meeting the demands which government and business are making upon the profession. Great numbers of men have gone into military work, thus depleting the staffs of many of the large accounting firms and sending some of the smaller firms entirely out of practice.

In the face of this decrease in personnel has come the abnormal increase in demand, and we have now reached a point at which it is practically impossible to obtain the services of accountants for some of the undertakings which should be given to their direction.

When the "work or fight" regulations were issued there was some misunderstanding of the classification of accountants, but this has been entirely cleared up by the action of the provost-marshal general. Public accountants as such do not come under the regulations of the provost-marshal general's department. In other words, a man in a deferred classification of the draft will not be obliged to give up his work as a public accountant in order to undertake some other activity.

This elucidation of the rulings is a distinct relief.

However, something further must be done. With the extension of the draft ages to include a great majority of practising public accountants, it seems perfectly reasonable that the commissioner of internal revenue and other government officers should begin to be anxious.

The American Institute of Accountants may not depart from the attitude which it has taken in regard to deprecating exemption from military duty, but with the facts before it we doubt exceedingly if the institute will do anything to prevent such exemption in the case of properly qualified accountants.

That point raises one of the most difficult questions which will be encountered—namely, a determination who shall be and who shall not be exempt under the exemption called for by the commissioner of internal revenue. There is, unfortunately, a considerable army of gallant persons who would be glad to assume the cloak of accountancy, if by so doing they could procure for themselves protection against the shells of the Hun. Perhaps it would be better to say they would seek to assume the cloak.

The office of the institute has been besieged by persons professing to have accounting ability who were imbued with the desire to serve the country in an accounting capacity, believing

that by so doing they would not be left in the category of men eligible for the draft. Many of these have displayed no evidence whatever of even a bowing acquaintance with accounting.

If this condition has prevailed when there was no certainty of exemption for accountants, it may readily be imagined how great will be the pressure of applicants for recognition as accountants if exemption be specifically provided.

This is a difficult question and one that will require careful consideration.

At the outset it seems that two things must be borne in mind.

The first necessity will be a regulation somewhat similar to that adopted in Great Britain whereby accountants, engaged in practice, will be exempt over a certain age or at all ages as the requirements of the case may dictate. It will not be sufficient to provide that certified public accountants shall be exempt, because the fact is that there are great numbers of men legally rated as certified public accountants who have not practised accounting and have no intention, apparently, of doing so.

There are others whose experience has been brief and whose knowledge is superficial.

A considerable practice record should be required of every accountant before placing him in the exempt class.

The second necessity will be the designation of competent judges to determine the qualifications of persons claiming to be accountants. Not all practice is valuable. The man who keeps the grocer's book from nine to five may write up the shoemaker's books from five to six and the baker's books from six to seven. Such a man often describes himself as a public accountant.

In determining the incidence of exemption there should be a board qualified to judge, and upon the recommendation of that board the war department should act.

Other difficult problems will arise in the effort to bring about an adequate and not too elastic exemption, but no doubt they will be overcome in due time.

Viewing the problem as a whole it seems to us that while it is always deplorable to make a class exemption in time of war, if such exemption is ever justified, it is now in the case of accountants, physicians, chemists and possibly a few other classes of men.

Cost-Plus Contracts

From time to time since the government embarked upon its plan of purchasing goods upon a cost-plus-percentage-of-profit basis we have commented upon the developments of the theory.

There is much to be said against the principle of paying for goods a price representing cost and a percentage of profit. It is so difficult to prevent undue inflation of cost that the whole principle has been condemned by many careful thinkers.

As the forms of contract develop with the progress of the war there is a continuing improvement in the restrictive clauses. The latest form prepared by the pay corps of the navy is one of the best which has been brought to our attention, and we publish it herewith for the information of readers:

N. S. A.—535½—Purchase. 6-1-18. *Contract No*............

STANDARD MANUFACTURING COST-PLUS-PROFIT CONTRACT

[All correspondence relative to inspections, deliveries, damages, payments, etc., hereon, must refer to the above contract number.]

This contract, of two parts, made and entered into this............. day of ...., A. D. 19.., by and between.................. .... of .... in the State of ...., party of the first part, and the United States, by the Paymaster General United States Navy (Chief of the Bureau of Supplies and Accounts), acting under the direction of the Secretary of the Navy, party of the second part, *Witnesseth*, That, for and in consideration of the payments hereinafter specified, the party of the first part, the contractors and their personal and legal representatives, hereby covenant and agree to and with the party of the second part, as follows, viz:

1. The contractors will make the necessary outlays in advance and manufacture, furnish, and deliver .... to the department, in conformity with specifications dated..................... (Pamphlet No. ....), and drawings Nos. .... which said specifications and drawings shall be deemed and taken as forming a part of this contract with like operation and effect as if they were incorporated herein. The department may make changes as necessary in size and design of .... to be manufactured under this contract.

2. The contractors will begin to furnish and deliver said............ .... within .... and deliver all said .... within .... from the date hereof at a rate of .... per month.

3. Contractors have the right to anticipate and make deliveries of any

or all of said ....
prior to the delivery dates shown in the above schedule. Inspection at the contractor's plant and acceptance of ....
by the department shall constitute delivery by the contractors.

4. The provisions of this contract, and the specifications and the drawings aforesaid may be changed by the department, but no such change shall be made except on written order of the Paymaster General of the Navy.

5. It is further covenanted and agreed that in carrying out the provisions of the contract no person shall be employed who is undergoing sentence of imprisonment at hard labor which has been imposed by a court of the United States, or any State, Territory, or municipality having criminal jurisdiction; that the contract is upon the express condition that no Member of or Delegate to Congress, nor any person belonging to or employed in the naval service is, or shall be, admitted to any share or part therein or to any benefit to arise therefrom except as a member of a corporation; and that any transfer of the contract, or of any interest therein, to any person or party by the said party of the first part shall annul the same, so far as the United States is concerned.

6. The department will pay the contractors a profit of.................
....
completed and accepted hereunder and also actual cost of production, defined in subparagraphs (*a*) to (*e*) below. No profit will be allowed on costs under subparagraph (*e*). On such manufacturing work covered by this contract as the contractors may by specific authority of the Department procure on subcontracts, the profit allowed to the contractors will be one-half of the above-stated profit if the above-stated profit is a percentage on cost; if the above-stated profit is a lump sum, the profit allowed to the contractors will be reduced by an amount equal to........................
per cent. of the invoice cost of such subcontract work.

(*a*) Cost of all direct labor definitely ascertainable as necessary for and employed exclusively in the manufacture of the articles contracted for hereunder; but no labor shall be charged direct if labor for similar purposes, such as supervision, handling materials, tool-room expenses, etc., is charged as overhead expense to work other than that covered by this contract.

(*b*) Cost of all direct material definitely ascertainable as necessary for and devoted exclusively to the articles contracted for hereunder; but no material shall be charged direct if material for similar purposes is charged as overhead expense to work other than that covered by this contract. The cost of direct material shall be the net cost to the contractor, i. e., invoice cost less cash, trade and quantity discounts, plus duty, import expense, freight and drayage paid by the contractors. Scrap resulting from this contract shall belong to the department or at the option of the department a proper amount representing the value thereof shall be credited to the costs chargeable to the department under this contract.

(*c*) A proper proportion of overhead expenses. By the term "overhead expenses" is meant the indirect labor and other manufacturing expenses and the general and administrative expense of the contractors. It does not include interest; advertising; selling and collection expenses; excessive salaries; extraordinary repairs to buildings, or any other items properly chargeable to capital account; credit losses and customers' discounts; legal expenses incurred in connection with the adjustment of this contract with the department, or any legal expenses having no relation to this

contract; expenses incurred in connection with the issue of new stock or bonds; deferred charges having no relation to this contract; income, profit, and capital-stock taxes imposed by the United States Government. Depreciation at fair rates to be approved by the department will be allowed only on such property and equipment as is owned and being used by the contractor in the performance of this contract. Rental charges paid by the contractor for productive utilities will be analyzed as between (*a*) interest and profit, (*b*) maintenance, repairs, depreciation, taxes, insurance, etc., and only items under (*b*) will be allowed as an overhead expense.

(*d*) The foregoing items of cost shall apply as above specified to all labor, direct or indirect, and material involved in the manufacture of product under this contract, whether the same be actually applied to product accepted or not accepted by the department, provided that in the judgment of the department the contractor takes due precaution to prevent carelessness and unnecessary damage to material.

(*e*) Cost of necessary machinery and equipment, patterns and drawings, and temporary structures needed for the utilization and protection thereof acquired exclusively for and devoted solely to Navy work: *Provided,* That the acquisition or construction of all such property by the contractors shall be approved in advance by the department. The title to all such property shall, without further payment on the part of the department, vest in the department, and on termination of the contract the department may remove such machinery and equipment, patterns and drawings, and the materials of such temporary structures, or it may sell the same as provided by law. All materials, machinery, equipment, patterns, drawings, appurtenances, supplies, etc., paid for under this contract by the department become thereby the sole property of the department and are left in the possession of the contractors only for the purpose of this contract, and such machinery, equipment, patterns, drawings, and temporary structures shall be devoted exclusively to the purposes of this contract. Tool charges shall be fixed by the department to cover such use for other work by the contractor of the Government's machinery and equipment as may be approved, and such tool charges shall be deducted from the costs chargeable to the department under this contract.

7. The contractors will use every endeavor to perform their obligations under this contract to the satisfaction of the department and to obtain the materials, machinery, equipment, appurtenances, supplies, services, etc., required for the performance of this contract at the lowest possible prices, and shall in no case pay higher prices than are or would be paid for similar materials, etc., purchased at the same time and under like circumstances and conditions for other work in progress in the plant. Specifications and guarantees of all materials, machinery, and equipment, and the agreements under which such are purchased shall be subject to the approval of the department.

8. Higher rates of pay for labor shall not be allowed under this contract than are usually paid for similar work: *Provided,* That nothing herein shall be construed to prevent the contractors from assigning work in divisions or pieces at prices or rates considered reasonable.

9. Subject to inspection and acceptance of materials, equipment, etc., by the proper production inspectors, payment shall be made on the basis of actual expenditures made by the contractor under items (*a*) to (*e*) above and all proper accruals for overhead expense (item *c*), provided that all such accruals other than depreciation are adjusted within the life of the

contract to actual cash expenditures. Payments shall be made monthly by the department within ten days after submittal of bills in sextuplicate, certified in such manner as shall be directed by the Secretary of the Navy, to cover the approved actual cost for the previous month, as defined by items (*a*) to (*e*), inclusive, of paragraph 6, together with the profit accrued during the period. When necessary, special reimbursements shall be made not oftener than weekly for labor rolls, material bills, and also items under paragraph (*e*). The contractors shall take advantage of all discounts available, and when unable to take such advantage shall promptly notify the local inspectors of their inability and the reasons therefor.

10. The contractors shall keep or cause to have kept full and accurate accounts and records pertaining to this work and to all expenses proratable to this work, and all such accounts and records shall be open at all times to the department and its representatives, and such statements and returns relative to the expenditures shall be made as are directed by the department. No change shall be required in the present methods and principles of keeping costs, provided the department finds them adequate for the convenient and accurate determination of the proper charges against the department. So far as practicable, the contractors shall maintain a complete separate system of accounts for Government work. All information obtained from the contractors' accounts and records shall be treated as confidential. All books and records pertaining to the contract shall be preserved until at least two years have elapsed after final settlement of the contract.

11. All orders, prices, and awards for materials, etc., which is to be charged to the Government shall be subject to the approval of the Chief of the Bureau of .... and the Paymaster General, or their representatives. The Paymaster General will determine the cost as defined above, and his decision shall be binding, subject to the approval of the Secretary of the Navy.

12. All warrants for payment under this contract shall be made payable to the contractors.

13. When a payment is to be made under this contract, as a condition precedent thereto the Secretary of the Navy may, in his discretion, require evidence satisfactory to him to be furnished by the contractors showing what, if any, liens or rights in rem of any kind against any property paid for by the department under this contract have been or can be acquired for or on account of any work done or material furnished in connection therewith; but it is hereby further stipulated, covenanted, and agreed by the contractors for themselves and on their account, and for and on account of all persons, firms, associations, and corporations furnishing labor and material for use in the prosecution of this contract, and this contract is upon the express condition that no liens or rights in rem of any kind shall lie or attach upon or against said property for or on account of any work done upon said property, or of any materials furnished therefor or in connection therewith, nor for or on account of any other cause or thing, or of any claim or demand of any kind, except the claims of the department.

14. When all conditions, covenants, and provisions of this contract shall have been performed and fulfilled by and on the part of the contractors they shall be entitled, within ten days after filing and acceptance of their claim, to receive such amount as they may be entitled to in final payment under this contract, on the execution of a final release to the department, in such form and containing such provisions as shall be approved by the Secretary of the Navy, of claims against the department arising under or by virtue of this contract.

15. The contractors shall not be liable for any delays or defaults in the performance of this contract due to strikes, riots, fires, floods, acts of God or the public enemy, acts of the Government, failure to secure materials

or transportation when due to no fault of the contractors, or other causes beyond their control.

16. If any disputes or doubts arise as to the meaning of anything in the contract, drawings, or specifications, or if any discrepancy appear between said drawings or specifications and this contract, the matter shall be referred at once to the Secretary of the Navy for determination, and his decision in the premises shall be conclusive and binding upon the parties hereto.

17. The department will hold and save the contractors, their successors and assigns, harmless from and against any and all suits that may be brought against them for or on account of alleged infringement of patents in the manufacture and delivery, in accordance with the provisions and requirements of this contract and of the drawings and specifications forming part thereof, of the .... to be furnished hereunder: *Provided,* That prompt notice of any and all such suits shall be given to the Secretary of the Navy by the contractors.

18. The department shall have the right to terminate this contract at any time as its interest may require: *Provided,* That if terminated before the completion of the work herein provided for a just and fair settlement shall be made with the contractors.

In witness whereof the said parties hereto have hereunto set their hands and seals the day and year first above written.

Signed and sealed in the presence of—

(See Note.)

....	.... [L. S.]
....	.... [L. S.]
.... *as to party of the first part.*	.... [L. S.]
.... *as to Paymaster General U. S. Navy.*	.... [L. S.] *Paymaster General U. S. Navy. Chief of the Bureau of Supplies and Accounts.*

Note.—Contracts and bonds signed by a firm must be duly signed in the firm name and by each member of the firm, each signature to be sealed with wax or wafer seal. Contracts signed by a corporation shall be signed with the corporate name, by an officer thereof or a duly authorized agent, and sealed with the corporate seal; evidence of authority for signature to be appended.

Income Tax Department

EDITED BY JOHN B. NIVEN, C.P.A.

In the August number of THE JOURNAL OF ACCOUNTANCY, in the course of remarks reviewing all that had been officially published on the subject of the corporation undistributed net income tax, we omitted to point out that article 238 of regulations 33, to which we referred, had been revoked when replaced by the more comprehensive regulations contained in T. D. 2736. The point we wished to make was that, while the former regulation is not sound in its assumption that the "net increase in current assets over current liabilities" is the undistributed income to be accounted for or taxed, yet in calling for a comparison of the financial statement at the end of the taxable year with that at the beginning, it suggests the most logical step and the proper accounting procedure to fix the status of the year's income at the close of the year. The next step is then to determine, by a somewhat similar process, how the changes in the six months ensuing affected its distribution.

Experience with the returns indicates that the bulk of corporate income will be found distributed or used for the purposes legally relieving it from tax. It is not, indeed, to be thought of as a direct revenue producer, but rather as a penalty on corporations for withholding earnings that might bring revenue to the government if they reached the stockholders.

* * * * * *

The only treasury decision published since the last issue is T. D. 2747, revising the previous ruling (T. D. 2135, January 23, 1915, whereby compensation under accident insurance policies for injuries received was returnable as income) and rendering non-taxable all recoveries for personal injuries from accidents, whether received under accident policies, suits or compromises.

TREASURY RULINGS

(T. D. 2747, July 12, 1918)

Proceeds of accident insurance policies received by individuals on account of personal injuries sustained through accident.

The attorney general has advised, upon the basis of recent decisions of the supreme court (*Doyle vs. Mitchell Bros. Co.*, decided May 20 last, *Lynch vs. Hornby*, *Lynch vs. Turrish* and *Southern Pacific Co. vs. Lowe*, decided June 3 last), and it is accordingly held, that the proceeds of an accident insurance policy received by an individual on account of personal injuries sustained by him through accident are not income taxable under the provisions of title I of the act of September 8, 1916, as amended by title XII of the act of October 3, 1917, and of title I of the act of October 3, 1917.

It is held upon similar principles that an amount received by an individual as the result of a suit or compromise for personal injuries sustained by him through accident is not income taxable under the provisions of said titles.

Such provisions of treasury decisions and of regulations No. 33, revised, as are inconsistent herewith are hereby revoked.

Students' Department

EDITED BY SEYMOUR WALTON, C.P.A.

(ASSISTED BY H. A. FINNEY, C.P.A.)

INSTITUTE EXAMINATION—MAY, 1918

In regard to the following attempt to present the correct solutions to the questions asked in the examination held by the American Institute of Accountants in May, 1918, the reader is cautioned against accepting the solutions as official. They have not been seen by the examiners—still less endorsed by them.

ACCOUNTING THEORY AND PRACTICE—PART I

Problem 1

BALANCE-SHEET

December 31, 1916

Assets

Cash		$3,000.00	
Accounts receivable		15,700.00	$18,700.00
Inventories			
Finished goods		154,500.00	
Goods in process		8,350.00	
Materials		55,000.00	217,850.00
			$236,550.00
Land		$40,000.00	
Buildings	$94,000.00		
Less reserve for depreciation	14,000.00	80,000.00	
Machinery and fixtures	$81,000.00		
Less reserve for depreciation	21,000.00	60,000.00	180,000.00
Deferred charges:			
Insurance and taxes			1,100.00
Total assets			$417,650.00
Deficit			52,850.00
			$470,500.00

Liabilities

Notes payable	$275,000.00	
Accounts payable	15,500.00	290,500.00
Capital stock:		
Preferred	100,000.00	
Common	80,000.00	180,000.00
		$470,500.00

The foregoing was the balance-sheet of a corporation, December 31, 1916, incorporated January 1, 1910, and during the ensuing year there occurred the following transactions:

Sales, net	$550,000.00
Purchases, net, raw material	347,000.00
Raw material inventory increased	64,000.00
Labor	60,000.00
Total manufacturing expense	35,900.00
Process inventory increased	20,000.00
Finished goods inventory decreased	36,000.00
Total selling expense	35,000.00
Total administrative expense	26,000.00

Notes payable have been renewed as they became due, except that $100,000.00, held by the largest owners in the company, has been donated to the company.

July 1, 1917	$100,000.00
$5,000.00 of 3½% Liberty bonds have been bought	5,000.00
$2,000.00 has been donated to the Red Cross	2,000.00

Notes:

Depreciation on buildings, estimated life 47 years, beginning January 1, 1910.

Depreciation on machinery, estimated life 27 years, beginning January 1, 1910.

Accounts receivable were $45,000.00, and accounts payable $15,000.00 at the close of the year.

There was accrued interest payable $2,500.00, December 31, 1917.

Prepare an operating and profit and loss statement for the year and a balance-sheet as on December 31, 1917; and calculate taxes to be paid to the United States government.

The pre-war profits were respectively $14,000.00, $8,250.00 and $5,500.00, for the years 1911, 1912 and 1913; and the invested capital for the corresponding years was $160,000.00, $160,000.00 and $140,000.00.

Solution, problem 1

It is first necessary to set up working papers or skeleton ledger accounts to obtain a trial balance. The following shows the ledger balances resulting from the stated transactions of the year, but without considering the variation in inventories, the depreciation and the interest accruals.

In regard to the interest, no information is given as to the amount paid on notes payable during the year. As the date and method of acquiring the Liberty bonds is unknown, the earnings from this source cannot be ascertained. It would be possible to compute the accrued interest on these bonds at December 31, 1917, if the applicant chanced to remember the interest dates of the bonds. But since the data is not stated in the problem the elements of interest are ignored.

TRIAL BALANCE

December 31, 1917

Capital stock, preferred		$100,000
Capital stock, common		80,000
Cash	$12,300	
Accounts receivable	45,000	
Inventories, Jan. 1		
Finished goods	154,500	
Goods in process	8,350	
Materials	55,000	
Land	40,000	
Buildings	94,000	
Reserve for depreciation, buildings		14,000
Machinery and fixtures	81,000	
Reserve for depreciation, machinery and fixtures		21,000
Liberty bonds	5,000	
Notes payable		175,000
Accounts payable		15,000
Sales		550,000
Insurance and taxes	1,100	
Purchases, raw material	347,000	
Labor	60,000	
Manufacturing expense	35,900	
Selling expense	35,000	
Administrative expense	26,000	
Donation to Red Cross	2,000	
Surplus		47,150
	$1,002,150	$1,002,150

The depreciation on buildings is $2,000 a year, and on machinery and fixtures $3,000 a year. Final inventories are computed as follows:

Raw material	119,000
Goods in process	28,350
Finished goods	118,500

As nothing is stated regarding the disposition of the deferred items of insurance and taxes at January 1, 1917, it is assumed that the same amount is to be deferred at the end of the year. This assumption is imperative since the problem states the total manufacturing expense. The required statements follow.

NAME OF COMPANY — Exhibit A

PROFIT AND LOSS STATEMENT

January 1, 1917, to December 31, 1917

Sales				$550,000
Deduct:				
Cost of goods sold				
Goods in process Jan. 1			$8,350	
Materials				
Inventory, Jan. 1	$55,000			
Purchases	347,000	$402,000		
Deduct inventory Dec. 31		119,000		
Materials used		$283,000		
Labor		60,000		
Manufacturing expense				
Paid	$35,900			
Depreciation—buildings	2,000			
Depreciation—Machinery and fixtures	3,000	40,900	383,900	
Total			$392,250	
Less inventory goods in process, Dec. 31			28,350	
Cost of goods manufactured			$363,900	
Add finished goods inventory, Jan. 1			154,500	
Total goods available for sale			$518,400	
Deduct finished goods inventory, Dec. 31			118,500	
Cost of goods sold				$399,900
Gross profit on sales				$150,100
Deduct selling expense				35,000
Net profit on sales				$115,100
Deduct:				
Administrative expenses			$26,000	
Accrued interest on notes payable			2,500	28,500
Net profit from operations				$86,600
Add:				
Donation of notes to company				100,000
Total				$186,600
Deduct donation to Red Cross				2,000
Net increase in surplus for the year				$184,600

Exhibit B

NAME OF COMPANY

BALANCE-SHEET

December 31, 1917

Assets

Current assets			
Cash		$12,300	
Accounts receivable		45,000	
Inventories			
Finished goods	$118,500		
Goods in process	28,350		
Raw material	119,000	265,850	$323,150
Deferred charges			
Insurance and taxes			1,100
Investments			
Liberty bonds			5,000
Fixed assets			
Land		$40,000	
Buildings	$94,000		
Less reserve for depreciation	16,000	78,000	
Machinery and fixtures	$81,000		
Less reserve for depreciation	24,000	57,000	175,000
			$504,250

Liabilities

Current liabilities			
Notes payable		$175,000	
Accounts payable		15,000	
Accrued interest payable		2,500	$192,500
Capital stock and surplus			
Capital stock, preferred	$100,000		
Capital stock, common	80,000	$180,000	
Surplus:			
Profit and contributed surplus for year (Ex. A)	$184,600		
Less deficit Jan. 1, 1917	52,850	131,750	311,750
			$504,250

The computation of the income and excess profit taxes follows:

Since the gift of $100,000 notes payable to the company and the $2,000 donation to the Red Cross by the company are not included in the computation of the taxable income,

The net income is			$86,600.00
The invested capital is			
Capital stock	$180,000		
Less deficit at January 1, 1917	52,850		
	$127,150		

Since the profits in the pre-war period averaged less than 7%, there is allowable

a deduction of 7% of $127,150, or	$8,900.50	
and a specific exemption of	3,000.00	11,900.50
leaving excess profits of		$74,699.50

	Excess profit	Tax
20% of (15% of 127,150, minus 11,900.50)	7,172.00	1,434.40
25% of (20% less 15% of 127,150)	6,357.50	1,589.38
35% of (25% less 20% of 127,150)	6,357.50	2,225.13
45% of (33% less 25% of 127,150)	10,172.00	4,577.40
60% of	44,640.50	26,784.30
Excess profit and tax thereon	74,699.50	36,610.61
Add income tax		
6% of (86,600—36,610.61) 49,989.39		2,999.36
Total tax		39,609.97

As no information is available as to the value of the stock at June 30, it is assumed that the capital stock tax is not to be considered.

Problem 2

During the year ended December 31, 1917, the A. B. C. cotton mills produced 3,893,000 pounds of finished product. There were turned into the mill during the year 4,250,000 pounds of cotton, costing $750,000.00, and 175,000 pounds of yarn, costing $60,000.00. The stock in process at the beginning of the year amounted to 150,000 pounds valued at $20,000.00, and at the end of the year to 200,000 pounds, valued at $60,000.00. Waste produced during the year was 420,000 pounds and realized $26,000.00. The factory expenses were: superintendence, $5,000.00; labor, $160,000.00; fuel, $20,000.00; oil, $1,500.00; mill supplies, $12,500.00; burlap, $4,500.00, and starch and sizing, $7,500.00. For its finished product sold the company realized $1,250,000.00. On the first of the year the value of the finished product on hand amounted to $26,000.00, and at the end of the year to $78,000.00. The selling expenses of the company amounted to $80,000.00, its general expenses to $22,500.00, and its extraordinary expenses not applicable to the cost of production to $50,000.00.

Prepare a comprehensive income account covering the year's operations and give statistics as to the sales and cost of production per pound by items with the invisible gain or loss during the year on cotton passing through the mill.

Solution, problem 2

A B C COTTON MILLS

Statement of Cost of Goods Manufactured

Year ended December 31, 1917

	Pounds	Value	Pounds	Value	Per pound 3,893,000 Pounds produced
Goods in process, Jan. 1, 1917			150,000	20,000	.00514
Materials turned into mill					
Cotton			4,250,000	750,000	.19265
Yarn			175,000	60,000	.01541
Total			4,575,000	830,000	.21320
Deduct:					
Waste sold	420,000	26,000			
Goods in process, Dec. 31, 1917	200,000	60,000	620,000	86,000	.02209
Materials put into finished goods—pounds			3,955,000		
Invisible loss—pounds			62,000		
Finished product produced—materials			3,893,000	744,000	.19111
Labor				160,000	.04110
Superintendence				5,000	.00128
Fuel				20,000	.00514
Oil				1,500	.00039
Burlap				4,500	.00116
Mill supplies				12,500	.00321
Starch and sizing				7,500	.00192
Total cost of manufacture			3,893,000	955,000	.24531

While the invisible loss is ascertained to be 62,000 pounds, it is impossible to determine the financial loss because the kind of commodity lost is unknown. For instance, the cotton cost about 17 cents per pound and the yarn about 34 cents. Hence, the loss of yarn is about twice as expensive as the loss of cotton.

A B C COTTON MILLS

Profit and Loss Statement

Year ending December 31, 1917

Sales			1,250,000
Deduct:			
Cost of sales			
Finished goods January 1, 1917	26,000		
Add finished product for the year	955,000	981,000	
Deduct finished goods inventory, December 31		78,000	903,000
Gross profit on sales			347,000
Deduct selling expense			80,000
Net profit on sales			267,000
Deduct:			
General expense		22,500	
Extraordinary expense		50,000	72,500
Net profit for the year			194,500

Problem 3

With what accounts of a bankrupt company would you open the books of the receiver? State your reasons for so doing.

Solution, problem 3

The books of the receiver would be opened by debits to accounts with assets the possession of which is taken over by the receiver, credits to reserves applying to these assets, and a credit to an account with the company in receivership for the net value of the assets. These entries are made to show the value of the assets for which the receiver is accountable.

The liabilities are not spread on his accounts when the books are opened, because they are not claims which the receiver is obliged to recognize until they are properly allowed; but any liens against specific assets should be indicated by memorandums in the asset accounts as an aid to the receiver in estimating the net realizable value of the property.

The liabilities, including the liens, would be entered on the books as soon as allowed by the court, the offsetting debits being to the account representing net value. If this last account has then a debit balance, it should be designated "deficiency."

The books can hardly be said to be really opened until all the liabilities are included.

Problem 4

Mention three classes of transactions which a debit item may represent in a personal account.

Solution, problem 4

A debit item in an account receivable might represent a sale, a note charged back, or a cash payment necessitated by a rebate or an allowance made after the account had been settled.

A debit item in an account payable might represent a cash payment, a settlement by note or an allowance for many possible causes.

Problem 5

You are asked by a client to discuss with him the question of reserves for depreciation and depletion of his various capital assets. State your position on this subject and enumerate the considerations you would advance in support thereof. Would you or would you not be guided by the rules laid down by the internal revenue authorities in deciding upon the rates to be used?

Solution, problem 5

As all capital assets tend to decrease in value, due to the expiration of time and to wear and tear and obsolescence, there will come a time when this loss will necessarily be reflected in the accounts. Since the loss is inevitable it is preferable to take it up gradually in part amounts rather than finally in total. Otherwise the operating costs will be understated in periods when replacements are not made, and the period in which the loss is eventually realized will be required to bear an undue proportion of costs. Not only does this distort the operating expenses by periods, but by overstating profits for the time being it encourages the payment of dividends which may in reality amount to dividends out of capital, with the possible results of creating a deficit when the property is sold or abandoned and rendering the directors liable for a depletion of capital through payment of dividends in excess of real profits.

In determining the amount of depreciation to be written off, consideration should be given to the cost, probable life as affected by use and extent of repairs, and estimated residual value after its life as a practical production factor is at an end. In estimating the life, consideration should be given not only to wear and tear, but also to obsolescence and possibly to supersession.

In regulating depreciation in respect to income taxes, the rates allowed by the internal revenue authorities are not rigidly binding, but are only typical, and all facts relating to depreciation are granted consideration. But deduction is allowed only for loss due to wear and tear. This does not include provision for obsolescence since it is provided that when an asset is actually determined to be obsolete the loss may be deducted at that time. However, obsolescence should usually be provided for periodically as well as depreciation from wear and tear, as the government's permission to make eventual deduction for loss from obsolescence does not justify a waiver of the fundamental accounting rule to provide for all possible losses.

Problem 6

Explain what is understood by a "book inventory" and indicate in what circumstances and for what purposes you would consider such a record to be of use in a manufacturing business

(a) For current information,
(b) For use in the preparation of interim statements of accounts,
(c) For use in the preparation of final yearly or half-yearly accounts.

Assuming your client decided to rely entirely upon such book records, what steps should be taken to guard their accuracy?

Solution, problem 6

A book inventory or perpetual inventory is a record of all goods put into and taken out of stock and the balance remaining on hand. It always shows quantities and it may or may not show values, but it must do so if the cost records are articulated with the general books.

As to its utility in furnishing current information, it shows the adequacy or inadequacy of stock on hand and with a proper scheme of dead-lines or low limits it reduces the danger of running short of stock. By maintaining a careful accounting of all items it tends to counteract temptations to misappropriation. Running inventories facilitate the keeping of cost accounts by showing the cost of materials going into process. As all goods received must be recorded in the inventories, an adequate receiving record is provided which may be of advantage in verifying liabilities to trade creditors.

For interim statements the books show an inventory which is available without the inconvenience of taking an actual inventory, and hence it is possible to make a closing and determine profits whenever desired.

The book inventories may also be used in final closings yearly or half-yearly, but it is desirable to have a verification of the stock on hand periodically and this verification is often in the form of an actual inventory at annual or semi-annual intervals, the actual inventory figures being used in these final statements.

Where no complete inventory is ever taken, tests of various items should be made when the book inventories indicate that stock is low and the labor of inventorying is reduced to a minimum. Thus book inventories may be frequently adjusted. Movements of stock should be evidenced by signed receipts by the storekeeper for stock received and signed work orders for stores issued. This tends to fix the responsibility and safeguard the stores and the inventories thereof.

Problem 7

What particular features is it necessary to bring out in the preparation of the annual accounts of a municipal or county government?

Solution, problem 7

The annual accounts should show the tax collections, the authorized rebates reducing the amount of the levy and the unpaid taxes. There should be a statement of receipts and disbursements, capital and revenue items being distinguished. The statements should show whether the city or county is living on its current revenues or is using capital receipts with which to pay revenue expenses. A balance-sheet should be prepared showing in separate sections the capital accounts, or fixed assets and liabilities, the general accounts, or floating assets and liabilities, the con-

dition of the various sinking or trust funds and the final surplus or deficit. The statements should show all accrued assets and liabilities, unsatisfied judgments for damages, the condition of special assessments, including the amount of bonds or warrants outstanding on each, and the unpaid special taxes with which these are to be paid.

Problem 8

You are called upon to advise a client who has large dealings, both buying and selling, with foreign countries, involving questions of foreign moneys and exchange. What general principles would guide you in advising him?

Solution, problem 8

If the client owns any capital assets in a foreign country these assets should be carried in the accounts at their cost in United States money at acquisition, which cost would be decreased if the exchange rate was favorable at acquisition and increased if the rate was unfavorable. Such assets would be shown in the balance-sheet at book value without any adjustment on account of exchange fluctuations.

Accounts with debtors and creditors involving the question of foreign money should be kept in two columns, all debits and credits being shown in foreign currency and also in United States money values computed at the rate of exchange applying at the date of the transactions. In closing the books and preparing final statements, the balance of the account in foreign coinage should be valued at the prevailing rate of exchange and the United States coinage value thus ascertained should be entered in the U. S. money column. The balance of the account will then represent any profit or loss resulting from exchange variations.

Market fluctuations in exchange are not reflected in the valuation of fixed assets and liabilities because of the general principle that market fluctuations of all kinds are ignored when the asset is not to be realized or the liability liquidated at market values. But in the case of accounts receivable and other floating assets currently realizable, and in the case of current liabilities where the cost of making settlement will depend upon current rates, present value as affected by favorable or unfavorable rates should be shown in the balance-sheet.

Problem 9

How should a re-appraisal of capital assets be treated on the books of a going concern

(a) When it involves an appreciation
(b) When it involves a depreciation?

Is such appreciation or depreciation a consideration which should be reflected in a return of net income to the federal authorities for income and excess profits tax purposes?

Solution, problem 9

An increase or decrease in the value of capital assets disclosed by an appraisal may be a recognition of improper depreciation charges in the past or of a rise or fall in replacement market values.

In case of appreciation due to former excessive depreciation charges an entry may properly be made debiting the asset or its relative reserve, if one has been set up, and crediting surplus, as the surplus has been improperly reduced. Such increments to surplus would be proper sources of dividends. If the appreciation merely follows a market increase no entry should be made, as fluctuations in market value of capital assets are unrealized and will not be realized as long as the asset remains a producing factor. Where an entry is insisted upon, the credit should not go to surplus, but should be put in some reserve account which will honestly acknowledge its unrealized nature.

In case of a depreciation in value which recognizes the inadequacy of former depreciation charges, surplus should be debited and the asset or its relative reserve credited. If the decreased value follows a market decline no entry need be made. As a book profit is not allowable on market increases, so a book loss on market decreases may be ignored in the accounts until the sale of the capital asset makes the loss a realized one.

Increases of this nature are not to be included in taxable income, and decreases are not allowable deductions from income in the current reports. Corrections of depreciation rates may involve correction of prior returns.

Delinquent Stock Subscriptions

Editor, Students' Department:

Sir: In connection with work upon a recent engagement I encountered a situation in respect of capital stock transactions of which nothing of a nature similar appears to be treated in the later accounting works, nor do I recall discussions in The Journal of Accountancy in respect to a like situation.

A corporation organized about eight years ago finds itself in the position of now having upon its books capital stock subscriptions in arrears. In many instances the total payments made are of such amount as would produce cumbersome fractional shares if stock were issued for the exact amount paid. The arrears are now found to be practically all uncollectible and for practical purposes constitute a worthless asset upon the books; yet in their present state they act as an obstacle to the securing of additional needed capital, through the sale of this stock to responsible purchasers.

Redress of some sort, other than an increase in capitalization, should be open to the company. What it desires to do is to issue shares for the amount paid and cancel the subscriptions in arrears. These latter shares would be then available for sale and added capital could thus be secured.

In the issuance of shares for payments made it is desired that only even shares be issued. Could the fractional amounts in excess of even shares be appropriated to surplus, or would it be necessary to return them by recourse to a special distribution of capital or carry them as a perpetual liability on the books? Also, considering that over six years have elapsed with no payments having been made (this would cover the time limit under the statute of limitations) could the subscriptions in arrears be canceled and the outstanding capital stock account be adjusted?

Yours truly,

R. F. R.

Portland, Oregon.

This question concerns what are known as "subscription rights." Several legal points are involved, on which this department does not presume to give an authoritative opinion, not knowing the Oregon laws.

A subscriber to capital stock, after his subscription has been accepted, and especially after part payments have been made, possesses the right to finish his subscription and take his stock. If he does not exercise this right at the time when calls are made, or within a reasonable time thereafter, the board of directors can notify him that if he does not make the payments that are in arrears within a specified number of days, his right to the subscription will be declared forfeited and the stock will be sold to someone else. Whether the money already paid can also be declared forfeited depends upon the conditions of the subscription and the laws of the state.

Having declared the subscription rights forfeited, the board can offer the stock for sale. If the price realized is less than par, the shortage may be taken out of the amount that was paid on the subscription. The balance of that amount would then be returned to the subscriber, less any expense of securing the new stockholder. As the subscription is an agreed debt, it may be held to be subject to the legal rate of interest, which would probably more than exhaust the part payments made on it.

As the subscription is a written contract, it would depend on the state law whether it became outlawed in six years or not. Some action on the part of the board of directors during that time may have served to keep it alive. Therefore, it is better to take formal steps to cancel it.

Some such action as indicated on the part of the board of directors would meet all the difficulties mentioned in this case. Of course, the directors are at fault in not having called the delinquent subscribers to account long ago. By sleeping on their right to cancel the subscriptions they have virtually given the subscribers a one-sided contract. If the company had suddenly become very prosperous, the subscribers could demand delivery of the stock to them at par, unless outlawed, or at best at par and legal simple interest from the dates of the calls.

Discount on Treasury Stock

Editor, Students' Department:

Sir: Do you consider it incorrect to charge working capital with stock originally sold at a discount and donated as working capital?

Treasury stock	xx	
(par value)		
To working capital		xx
At price originally sold		
To stock discount		xx
For % of discount on original sale		

Said stock was later disposed of at a still greater discount.

And if sold out of the treasury at par or a premium, how would you treat it?

I shall feel obliged for your opinion and reasons.

Yours truly,

J. V. R.

Having charged treasury stock at par and credited working capital at original selling price and discount on stock for the difference, a sale of stock from the treasury would be recorded according to the facts of the sale. If at a discount,

Cash	xx	
Discount on stock	xx	
Treasury stock (par)		xx

If at a premium, there being still a debit balance in discount on stock:

Cash	xx	
Treasury stock (par)		xx
Discount on stock		xx

If discount on stock has been written off, the last credit would be to premium on stock and would be a profit.

Allocating General Expense to Departments

Editor, Students' Department:

Sir: The writer is seeking authority whereby he can distribute Mr. Brown's salary with equity. Department managers are efficient and need his capital only.

The writer has been requested to remedy the trouble causing the contentions of department heads, and suggested using a per cent. of salary based on preceding year's purchases by each department. This in my mind approaches nearer to the center of facts than the system now in vogue as the percentage of profit is different in each department. My suggestion would give them a direct charge for each month in the year which would be the same amount each month for every department throughout that year (e. g., wholesale 50% = retail 33 1/3% = sp. sales 16 2/3%, same every month throughout that year).

The Journal of Accountancy and many books of reference have been searched to enable me to show a different method or authority to face criticism if my suggestions are carried out.

As for rent and heat, it is my expressed opinion, if the different departments should hire a store, the rent would be at a given price (direct expense) per month to be paid whether or not sales were made.

Advertising is done all in one advertisement or separately. Sometimes one department will advertise and get a prospective customer for one of the other departments.

Please advise me if my suggestions are practical or recommend some book or authority whereby this matter can be adjusted as early as convenient.

Yours truly,

F. E. P.

Bangor, Maine.

Problem of Unsatisfactory Results

Mr. Brown has a business of three (3) departments, viz: wholesale, retail and a special sales, occupying one store with a separate manager for each department.

Dissatisfaction in the equity of indirect expense, viz., advertising, heat, rent and Mr. Brown's salary of $5,000 per year.

The system in vogue calculates and distributes the indirect expenses by per cent. on each month's sales.

As far as rent, heat and light and advertising are concerned, I think you are both wrong. Rent is divided between departments in accordance with the value of the space occupied. Each department in turn is treated as an outsider to whom space is to be rented on the basis of how much it should be charged and of how much it is willing to pay. When an equitable sum is agreed upon for each, the proportion of the actual rent to be paid by each is ascertained. Sales have nothing whatever to do with it, nor purchases either. The occupant of desirable space must pay a high price for it or let some one else have it. An outside landlord would never agree to base his rent on a tenant's sales; therefore the business should not do so. Heat and light are usually included in rent, but if not, heat should be proportioned to square feet of floor space. Light would follow the same rule unless there is a difference in the length of time that artificial light is used in the various departments.

Unless the advertising is peculiar, it ought to be charged to each department in the proportion of the space devoted to it in each advertisement.

There is no rational basis for allocating the salary of the president, and no reason why it should be attempted. The president represents capital. He is the business personified. The business employs department heads to run the departments and report results. Up to this point each department pays its own expenses, direct and indirect, and that is all it should pay. If the business, or capital, finds it necessary to pay someone $5,000.00 to look after its interest, that is capital's loss—the departments are not concerned with it.

Sales of Raw Material

Editor, Students' Department:

Sir: Will you please advise me the best procedure to follow in a manufacturing concern where a cost system is contemplated in the event the following transaction should develop:

Materials received for manufacturing purposes are entered in detail on the store records and this total is controlled by an account on the ledger, known as materials, to which is debited the value of all materials purchased and placed in stores. Some of this material instead of being consumed in manufacture is jobbed. Will you please, therefore, advise me what entries are made when this material is taken from stores and sold? Of course the sale is recorded in the sales book and the specific material is given credit in the stores record, but I am anxious to be informed as to the proper entries required in the general books. Am I correct in assuming that cost of sales is debited and sales credited, likewise the controlling account materials credited with the value of the merchandise sold outright?

I am also dubious about the proper method of handling finished goods sold and subsequently returned by the customers. Of course, when the finished product was completed and placed in stock subject to shipment, finished goods account was debited and some other appropriate account was credited; likewise the cost of sales was debited and sales credited. Now when the merchandise is returned by the customer and duly received and placed in stock, what entries are correct in properly recording this

transaction? I imagine it is necessary to debit return sales and credit the customer's account, but I do not know how this return would be reflected on either the finished goods account or some other similar account on the books accounting for its return.

Yours truly,

F. C. B.

The cost of materials taken from stores which are for jobbing sales may be debited to cost of jobbing merchandise sold and credited to the materials controlling account. You could, of course, debit it to cost of goods sold, but as this account generally includes only manufactured product sold it might be advisable to keep the cost of jobbing merchandise sold in order to have accurate data on the amount of this kind of business. The sales might be classified in the same way if desired.

Unless the amount of material thus sold is so small as to be negligible, it would not be proper to enter the sales in the sales book in the same column as finished goods sales. They should be placed in a separate category. The business of the manufacturer is to make and sell finished goods, and the data in regard to these goods should not be confused by the introduction of extraneous items. Otherwise the operating statistics would not be trustworthy.

When finished goods sold are returned by customers the first entry would naturally be debiting returns sales account and crediting the customer. Another entry should then be made debiting the finished goods account and crediting cost of finished goods sold. The last entry would put the goods back into the inventory and give the cost of finished goods sold account credit for the cost of the goods which were originally charged to that account when the sale was made.

Book Reviews

HOW TO DO BUSINESS BY LETTER, by SHERWIN CODY. *World Book Co.,* Yonkers, N. Y., 1918.

A new edition of Sherwin Cody's little book, *How to Do Business by Letter,* has been published and is supplemented by another useful work entitled *Word Study and 100% Business Speller.* There is also a supplementary pamphlet containing exercises in business letter writing. The average business man has become so careless in the use of words that we believe every office should have in it a book describing what to write and what not to write. Mr. Cody has produced an excellent book and many business men could study it with advantage.

We thoroughly approve any book which condemns such common and objectionable words as "locate," "same" as a pronoun, "onto" and many others which sometimes induce even the most colloquial of us to incline to purism.

AN INTRODUCTION TO STATISTICAL METHODS, by HORACE SECRIST, PH.D., *The MacMillan Company,* New York. $2.

It goes without saying that compiling the vital statistics of a business is coming more and more to be regarded as a regular part of the work of an auditor. For the general public, the creditors, the stock exchanges, et al., it may be sufficient to submit a balance-sheet and a profit and loss statement duly certified, but when an audit is made for the purpose of giving full and accurate information to directors, officers and stockholders, the auditor who is unable to grasp the essential and vital facts affecting the success of a business and lay them before his clients in statistical form is in a bad fix. So it seems a bit strange that so little attention is paid to this branch of professional education. Accounting text-books rarely have much to say about it, and in the colleges the student who has the rare far-sightedness to wish to study the subject must go to the department of economics. Most of us, we dare say, have picked up what little we know about the rather abstruse subject hap-hazard and by rule-of-thumb, as when we are requested to investigate some department to find out just how profitable it may be. Common sense in such cases is a fair guide, but there is a technique to this kind of work which ought to be taught to the candidate seeking admission to the American Institute of Accountants. No doubt it will come in time.

Dr. Secrist, who is associate professor of economics and statistics at the Northwestern University, offers a text-book on statistical methods for the use of college students and business executives which we venture to think furnishes a solid basis for statistical training. In the words of the author—

> "Our study is primarily one of methods—methods in the collection and utilization of numerical data to throw light upon economic and business problems. It attempts to reduce to a workable basis the principles of statistical analysis and to illustrate their force and the methods of applying them to concrete problems." (pp. 2-3)

It is true, of course, that the book is primarily intended for those who propose to become professional statisticians, but as we have already remarked, a public accountant ought to know at least the how of statistical analysis and demonstration even if he is not much interested in the why which Dr. Secrist explains very lucidly. Chapter III of the book is an illuminating exposition of why so many unthinking people subscribe unreservedly to the old slur, "Anything can be proved by statistics!" As the author shows, it is the careless, or worse, abuse, not the honest and scientific use of statistical methods, that has given rise to this sweeping generalization.

W. H. L.

Correspondence

Further Discussion of Discount on Capital Stock.

Editor, The Journal of Accountancy:

SIR: It seems that the views I presented in the April number concerning discount on capital stock were too concise to be thoroughly understood by many.

Of course my discussion in no wise concerns the treatment of discount on treasury stock.

Some accountants tell me that it is correct to show the discount on the asset side of the balance-sheet, not as an asset but as a debit item. I disagree with them. It should never appear as a debit item for the very excellent reason that nothing should be on the debit side either as an asset, a deferred charge, a debit item or otherwise unless it represents previous, present or future value.

I hold to the statement that under no conditions should the discount appear as a debit item.

As I have said, discount on stock is nil. It merely represents the difference between the original net worth and the par of the capital stock and it is purely fictitious. It is properly a contra against capital stock account and must be so considered. Until profits are earned the liability upon the capital stock cannot possibly be greater than the original net worth; and when they are earned, while the total liability to stockholders is greater (the increase representing profits), the liability upon the capital stock alone as distinguished from the liability arising from profits can properly be increased only by the action of the directors in authorizing a transfer of undivided profits or surplus.

As I have said, this action is not necessary, but would be a good policy. The undivided profits and the surplus can quickly be paid out while the liability upon the capital stock is considered permanent until reduced by losses. Creditors and investors think more highly of a company having a liability upon stock equal to its par and a smaller surplus than one having a larger surplus and a liability upon stock less than its par.

The correct procedure to increase the liability upon capital stock is as a disposition (transfer) of undivided profits or surplus, not, as is being done now, by making a charge against profits and consequently decreasing the true earnings.

I am afraid that many accountants do not understand the distinction between charging the discount against profits and disposing of it as a disposition of profits. To charge it against undivided profits or surplus is just as wrong as it is to charge it against operating profits. Disposing of it does not affect the net worth any more than does the establishment of a sinking fund reserve.

In an analysis of the revenue and surplus statement the discount disposed of as a disposition (transfer) of undivided profits or surplus would not be picked out as a charge (expense or loss) passed through undivided profits or surplus instead of directly against operating profits.

Assume that a company issues $100,000 of stock at 90. Applying my treatment the balance-sheet would show

Capital stock	$100,000	
Discount on stock	10,000	
		$90,000

If at the end of the first year its net profits were $10,000, the balance-sheet would then show

Capital stock	$100,000	
Discount on stock	10,000	
		$90,000
Undivided profits or surplus		10,000

If it is decided to dispose of $2,000 of the discount by a transfer of undivided profits or surplus the balance-sheet would then show

Capital stock	$100,000	
Discount on stock	8,000	
		$92,000
Undivided profits or surplus		8,000

Applying the theory of considering the discount a deferred charge against profits the revenue and surplus statement would, in the above case, incorrectly show net profits of only $8,000. Applying my theory it would correctly show net profits of $10,000 and a transfer of undivided profits or surplus of $2,000.

Consider this important point: The directors of a corporation alone have control over the undivided profits and the surplus. They (or the stockholders) only have power to increase the original liability upon the capital stock and if they decide to do so it is done by a transfer from undivided profits or surplus. In the face of this, by charging the discount against profits, frequently upon the accountant's advice, the officers are taking unto themselves these important powers.

Yours truly,

JOSEPH ROBINSON.

Frederick G. Colley announces the opening of offices at 43 Exchange Place, New York, for the practice of accounting under the name of Frederick G. Colley & Company.

Frank Wittenberg announces the removal of his office to room 601 A. O. U. W. building, Little Rock, Arkansas.

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Report of the President*

Greeting you today after occupying the presidency for two years, I would first thank you for the splendid support you have accorded me and for the willingness you have almost invariably shown to make the institute the mouthpiece of the profession.

I am conscious of many of my shortcomings, but your executive committee has always been ready to sit with me and advise on the many perplexing questions which have arisen during the past twelve months.

We have probably disappointed some members by the decisions made from time to time, but we have always striven to attain the best results for the institute at large. To those who may have felt that we should have seen with them on some particular matter, I would say that each of us has his pet hobby in accountancy and is prone to believe that his line of reasoning is the best; but, after all, the view of the many should prevail. If the consensus of opinion is against us we should, for the good of the profession, adopt the principles laid down by the majority, for surely uniformity of practice and strict conformity to the rules of ethics will find favor with the public at large and enhance the reputation of the individual member as well as that of the institute as a whole. So I would beg of you to remember that we are the pioneers of the profession and that the standards set by us today will either make or mar its future.

The library is well established and members are availing themselves of the opportunities it affords.

Considerable advantage has been taken by the members of the opportunity to get advice on questions arising in their practice with which they are not familiar. This branch of the institute's

*Presented at the annual meeting of the American Institute of Accountants, Atlantic City, New Jersey, September 17, 1918.

usefulness will grow as the membership increases, especially with the admission of the younger members of the profession, whose experience, in the main, lies before them.

During the year many members of the institute have given their services to the government either fully or in part, and I know I am voicing your wishes when I thank them in your name for all they have done toward bringing the war to a successful issue.

Some have the proud privilege of serving in the lines in France, others back of the lines in France and still others in various capacities at home, but no matter where a member of the institute is serving he has earned the thanks of those in authority, and over and over again the American Institute of Accountants has been thanked for the way in which the members have seen their duty and responded to the many calls made by the army, navy, treasury and various government bureaus as well as by the Red Cross, Y. M. C. A. and other war agencies.

I cannot leave this subject without offering our sincere sympathy to those of our members who have made the supreme sacrifice and whose sons now rest "Somewhere in France."

Our thanks are due to the various committees for the manner in which they have dealt with the matters referred to them, and especially to the board of examiners for the highly satisfactory work which it has accomplished.

THE JOURNAL OF ACCOUNTANCY has met with continued success. Much of our accountancy literature will find its way into THE JOURNAL, and on behalf of the committee on JOURNAL I beg the members who are of a literary turn of mind to write papers and articles for publication so that in course of time the library may contain answers to most of the questions which the members may ask.

Naturally, during the war we can hardly expect the membership of the institute to be very largely augmented, but I do feel it my duty to say to every member that he should make it generally known that we are desirous of having in our society all accountants who are practising in the United States, whether principals or assistants, and all we ask of them in order to become members, beyond their integrity of course, is that they shall have received a good education and can demonstrate that they have the knowledge and ability to practise.

This, of course, can only be tested by examination, and for associate membership only to the point where it is reasonably sure that the applicant has studied accountancy and kindred subjects and knows enough of practical accounting to assure that he can be trusted to undertake the ordinary routine work of an accountant's practice, while he acquires the wider knowledge of accountancy which will enable him to pass the further examination necessary to become a full-fledged member.

The institute would have it known that it is not an exclusive body and that it seeks to include all who desire to become members or associates, only putting up such safeguards as will reasonably assure the financial and business world that those who are members or associates are men of honor and competent to practise as public accountants, and further that they are amenable to the constitution and by-laws of the institute, which provide for proper disciplining if charges are brought and sustained on hearing.

After the war our direct institute activities will increase, but until the victory is won our ever-present duty is to do everything in our power to attain this end.

Many interesting subjects will be brought before you at this meeting, and I know you will give them due consideration.

It is a pleasure to find the accountants working together in their local societies with oneness of purpose.

My sincere thanks are due to A. P. Richardson, our very able secretary, for the manner in which he and his staff have conducted the institute's business, and for his readiness to advise and assist me with the problems presented during the past year.

W. SANDERS DAVIES, *President.*

September 1, 1918.

The Accountants' Bit in the American Expeditionary Forces*

By Major C. B. Holloway

The secretary of the American Institute of Accountants has inquired as to how public accountants are "doing their bit" with the American expeditionary forces. This apparently simple question is as tricky as some of those seemingly innocent questions which unfeeling C.P.A. examining boards are so prone to hurl at their unsuspecting victims. It opens up unlimited opportunities for oratorical flights and Fourth of July sentiments, but unfortunately this particular accountant has his nose so intimately associated with the grindstone that he has very little time or energy left for indulging the literary muse.

In the course of my pilgrim's progress from the accounts and contracts section of the office of the chief engineer A. E. F., to the direction of the bureau of accounts of the American E. F., attached to the general purchasing agent, I have had occasion to seek and come in touch with sundry public and business accountants engaged in various functions, and I believe that the question as to what accountants are doing in the American E. F. can best be answered by "a little of everything."

A large proportion has gone into the combatant end and so looks down with pity and contumely upon us less fortunate individuals in the services of supply. Many are engaged in financial, accounting and adjustment matters within the respective departments, and a surprisingly large per cent. is making good in supply, transportation and construction matters for which they had no previous technical training. The outstanding (if not surprising) fact is the facility with which they have adjusted themselves to any position to which they have been assigned, regardless of previous experience, and the almost uniform success with which they have met. In pondering the matter over, it would appear, after all, only a logical conclusion, in the light of the variety of experiences and emergencies which the profession faces daily in civil life through the very nature of its work and the scope of its activities.

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*Passed by censor. Read at the annual meeting of the American Institute of Accountants, Atlantic City, New Jersey, September 17, 1918.

While the quantity of qualified public or business accounting personnel in the American E. F. is not considerable, yet it would be impossible to digest into one brief article the variety of functions engaging the attention of this personnel. The profession is being used primarily by the respective departments in connection with accounts and finance, but very valuable work has been done in many instances in connection with organization and particularly with office and supply systems.

In February I was delegated to make investigations and recommendations relative to the organization of a central bureau of accounts of the American expeditionary forces, with the result that in the latter part of March the bureau of accounts, attached to the office of the general purchasing agent, was established by general order.

Some of the more important functions of the bureau of accounts are as follows: (a) responsibility for keeping a consolidated record of the accounts of the United States in Europe; (b) information and statistics with respect to claims, contracts, arrangements for replacements and obligations both against and in favor of the United States; (c) information and statistics with respect to the cost of facilities or improvements laid down by the United States in Europe; (d) methods of money and property accounting; (e) uniformity and standardization of accounting methods, forms and procedures affecting more than one department or service of the American E. F. and affecting relations with allied governments, treasury officials, etc.

As will be seen from the above, this is rather a large order, not the least important part of which has been the preparation of forms and systems for receipting, billing and accounting with allied governments. The work of the bureau has carried its representatives over the face of France, from the front lines to the ports. At present there are in the American E. F. three control bureaus, etc., having to do with finance, accounting and legal matters, of which two are under the immediate direction of public accountants. As a result of his excellent work as chief assistant of the bureau of accounts, Captain R. Ives, engineers R. C., of Lovejoy, Mather, Hough & Stagg, New York, has been made financial requisition officer of the American expeditionary forces.

We over here are very grateful to the American Institute for its assistance in selecting accountants to be commissioned and for

its interest in our progress and welfare. The need of qualified technical accountants is being recognized more fully as the war progresses, and although accounting is not the most popular work in the service, at least it is necessary, and the members of the profession over here have already proved both their ability to render it of current, constructive value and their adaptability to wholly new and different lines of endeavor. The "proof of the pudding" has been convincingly, distressingly and amusingly brought home to me in my sundry attempts to blast loose from the respective departments certain public accountants who were needed for the bureau of accounts. Such attempts made me just about as popular as a patch of poison ivy at a Sunday-school picnic.

Emergency operations over here require us constantly to work with one eye on the immediate needs and the other on the future. One must needs become an agile mental contortionist, but up to the present we have avoided becoming permanently cross-eyed from these intellectual gymnastics. In all the variety of experiences and working conditions which a member of the profession could face in one civilian business life-time, I think there could hardly be comprised as many phases and emergencies, as many problems of operating conditions and personal contact, and as great exigencies of time and personnel as the operations of this colossal war organization bring to the fore constantly. Experience in the American E. F. in relation to civilian life can aptly be contrasted by a comparison of the intensive cultivation of this beautiful and miniature France with the wholesale cultivation of our own glorious, extravagant country.

This article started out to be an exposition of what public accountants are doing in the American expeditionary forces, but seems to have resulted in a rambling dissertation on "shoes and ships and sealing wax." At some later date when I have more time ("and there ain't no such animal" in the American E. F.) I will try to send you some short articles on the more distinctive and individual phases of the work of accountants over here. Meantime it will be of interest to learn that the technical public accountant has received some share of recognition as such in the stupendous operations here at the scene of action.

An Examiner's Impressions*

By John P. Archer, C.P.A.

Reviewing the results of the several examinations during the past eighteen months, from a comparative standpoint, it is gratifying to note the general improvement in the answers to the questions in auditing and commercial law, also to those in accounting theory and practice, parts I and II, other than the problems. There has evidently been a studious application to sundry and various text-books and a commendable attention to instructors. The stumbling-block to many candidates, however, continues to be the problems in practical accounting, and the indication is that few candidates have had experience in the offices of public accountants. Doubtless, good use is made by the students of the solutions to problems appearing in The Journal of Accountancy. These solutions are particularly good and should be of material assistance, but do not appear to be altogether sufficient for the requirements of the institute in this particular.

From a careful inspection of the working papers it is quite noticeable how many candidates rush at the problems without a proper preliminary contemplation thereof, with the result that they find themselves in difficulty at the expiration of the first half of the time allotted and finish the paper in an indifferent and careless manner. Others fail to do themselves justice because of an apprehensiveness, amounting to fear, that the certain requirements will not be fulfilled in the time provided. A deliberate careful contemplation of the questions at the outset and a thorough grasp of the exact requirements before any attempt is made to answer would prevent many a regretful moment after and there would be little necessity for the waste of stationery exhibited in several instances.

On many papers in auditing and commercial law there was shown an evident desire on the part of the candidate to write as much as possible on some subject with which he was quite familiar, and this frequently resulted in the introduction of an amount of extraneous matter which could well be dispensed with. On the other hand, answers to the same question were given which,

*A paper read at the annual meeting of the American Institute of Accountants, Atlantic City, New Jersey, September 18, 1918.

although good, were entirely too brief and curt. It is, of course, difficult to regulate the length and extent of an answer, but it was most marked that answers to the same question ranged from a quarter of a page to a page and a quarter and usually the quarter-page effort embodied a more direct, explicit and therefore acceptable answer to the question than the lengthy one.

Often, too little attention is given to penmanship, orthography, neatness and grammatical expression. Speed is commendable, accuracy essential, but even with these two important qualifications the paper is at a decided disadvantage if the writing be indistinct and difficult to decipher, figures badly formed and out of alignment, spelling incorrect and the work generally untidy.

The examiner's work is arduous enough without being compelled to spend unnecessary time in attempting to ascertain what it is the intention of the candidate to express. In such cases he may be excused for becoming a trifle impatient and perhaps depriving the candidate of a few marks to which he would otherwise be entitled. The candidate should bear in mind that, if what he is striving for is accomplished, his reports and statements will at some future time reach the report department for review and typing, and much will depend upon the neatness and expression of his papers, especially if—as sometimes happens—reports and statements have to be prepared for presentation to clients at short notice.

Occasionally, one meets with a slight variation from the generally stereotyped method or form of answer which tends to relieve the monotony of matters for the examiner, although it is questionable whether attempts at intentional humor should be indulged. These, however, may be excused, but angry and petulant comments should not be made on any account. On some few occasions such have appeared, but usually, it is only fair to say, upon papers which compared most unfavorably with those of successful candidates.

One peculiar instance is recalled of a set of papers received from one provincial town where, during the examination, a somewhat disturbing incident occurred. The candidate who presented the worst paper was loud in comment, while he who presented the best paper made no mention of the matter.

One or two rather unique phrases from recent answers may here be quoted.

A reply (in part) to the question as to the "extent of an auditor's responsibility in respect to the classification of assets and liabilities on a balance-sheet to which he certified" read "The auditor may be called a watch-dog but he is certainly not a bloodhound."

Another would "quicken his awareness" if the "system of the concern under audit was defective as to internal check."

Another replying as to how he would proceed if the accounts of a corporation were in his judgment incorrect and he was unable to induce the officers to make changes imperatively called for, etc., "would look to the directors to work out his troubles with him."

Accountants and the Food Administration*

By Herbert G. Stockwell, C.P.A.

I am of the opinion that every member of the American Institute of Accountants will voluntarily fix or will have to fix his private practice at the absolute minimum and the contribution of his services at the absolute maximum in an effort to win this war. I think that after the next six months we shall see a different condition than now prevails. I think that business then will become more nearly normal; but during the next six months we should look about us to discover some way by which our particular services may constitute a punch toward the closing up of the war business and the resumption of the country's normal activities.

Of all the various services called for from accountants in aid of our national government in its prosecution of the war, there is none more intricate and with greater possibilities for future as well as present benefit to the American people than that offered by the United States food administration. The officers at Washington are organizing in every state a division of the food administration comparable to what in the Pennsylvania organization we call the "division of auditing." I was urgently invited to organize this division, and am, therefore, in a position to know something about its condition, purposes, accomplishments and hopes. We are authorized to employ a staff of paid accountants, the compensation being measured by the value of the service rendered.

The basic idea of the service to be performed by the auditing division is that its traveling auditors are better equipped than any other officers or assistants in the administration to ascertain facts from the books of concerns against which complaints have been lodged. Founded on that basis, the service is further extended to the examination of accounts of concerns at unexpected visits, under a plan somewhat similar to that of national bank examiners' visits to national banking institutions; but beyond these primary purposes, there is a deeper economic and social service which accountants may render in two directions:

*A paper read at the annual meeting of the American Institute of Accountants, Atlantic City, New Jersey, September 17, 1918.

First, we are making an effort to determine what are fair margins of profit for the various classes of business men who handle foods, from the farmer to the consumer, taking into consideration present expenses of all kinds, as compared with those existing prior to the war.

Second, there is the educational side, the part which the division of auditing plays being the instruction of the various classes of food manufacturers and merchants in methods of bookkeeping, where such methods or lack of methods create conditions wherein it is impossible for the proprietor himself to determine where he stands in relation to himself, his creditors, his customers or his country. In this effort, it is not intended, nor would it be desirable for the division, to prepare complete bookkeeping systems for each or any of the various classes of food handlers.

It is among those, such as, for example, the retail grocer who is usually known as the corner grocer, that simple instruction is helpful. From tests made and from information obtained we know that most retail grocers keep no books whatever and have no information regarding their business facts as expressed in assets and liabilities, sales for any given period, purchases, inventory, gross profits, expenses and net profit.

The far reaching importance of improvements among corner grocers will be seen when it is recognized that the corner grocer is to many people the first contact they have with business principles. If the corner grocer is slovenly, tricky, inaccurate in his accounts and his business relations with the consumer, the effect is far different from what it would be if he, the pioneer of business so far as many consumers are concerned, represented good business principles and good accounting, even though expressed in the simplest terms.

On the other hand, the corner grocer, if accurate in simple accounting methods, improves his position toward the wholesaler, the banker and the manufacturer. In other words, a better tone all the way through the business fabric may be created by the installation of simple bookkeeping methods among this class of business men.

Every state has a federal food administrator, under direct authority and in close association with Mr. Hoover. Many of the state administrators, I have no doubt, would welcome the services of the members of our institute. In the food administra-

tion the division of auditing becomes important because so many things hinge upon the information possessed by the accountant as to general business facts and conditions prior to any individual examination and the trustworthiness of his conservative work after examination. These tend to create respect for the auditor by his associates in the administration. In other words, every member of this institute who becomes head of the division of auditing in his own state can create for himself, in the service of his country, a position in which he will be welcome as an associate, rather than a mere auditor or employee.

If he can manage his business so that a sufficient amount of time may be given to the food administration voluntarily and without compensation, the accountant will feel an ever-growing interest in his work, and that work is extremely important, because during the next six months, with the increasing number of men going to the front, and with increasing demands of the allies for food, every effort must be put forth for food conservation and for the elimination of profiteering.

Governmental Sinking Funds, Serial Bonds and Depreciation Reserves*

By Harvey S. Chase, C.P.A.

Some months ago a friendly invitation came to me in Boston from your president requesting me to prepare a paper on an accounting subject for this convention. In accepting this kindly invitation I chose the title of this address for the reason that I had intended for some time to write out conclusions reached by experience in reorganizing governmental accounting methods in various cities and states, as well as in departments of the United States government. This experience has extended over some twenty years, and, naturally, has embraced many sides and types of governmental accounts, only a small part of which can be condensed into a paper suitable to present to a convention of accountants.

I will, therefore, confine my address mainly to a few illustrations and explanations with the hope that many questions and comments may be brought out in discussion afterward. For this reason I have made the paper short, although there are many other equally interesting problems which I should have been glad to have referred to in it.

To come to my point at once, I will take for granted that we do not need, in this audience, to define either "sinking fund" or "serial bond," for these, I believe, have meanings which are almost universally accepted. "Depreciation," however, is a term which includes so many different interpretations that I must be more careful in my use of it, and must explain as clearly as possible what my application of it includes.

Some years ago (in 1911) I was retained by the governor of the commonwealth of Massachusetts to investigate the financial departments of the state government and to report to him and to the legislature concerning the accuracy and sufficiency of the accounting methods then in use. A series of reports resulted concerning one department after another, in much the fashion in which I had previously reported to the mayor of Boston upon that city's financial affairs during previous years.

*An address before the Dominion Association of Chartered Accountants, at Montreal, Quebec, September, 1918.

It has happened that my practice as a professional accountant has had largely to do with public matters, including public service utilities and municipal industries. I had necessarily made a thorough study of depreciation, having been retained in a number of important cases of litigation as expert witness. These cases related to questions at issue between municipal governments and public service companies, such as the Boston Consolidated Gas case, the Holyoke Water case, the Haverhill Gas case, the Norwich Gas case, etc. All of these cases bore directly upon questions of depreciation.

In the investigation of the department of the treasurer and receiver-general of Massachusetts, a controversy arose concerning the condition of the sinking funds of the state, and hearings were held by the joint committee on ways and means of the legislature (general court, so-called) at which I was called upon to testify.

Much of the testimony related to the methods then in vogue for calculating sinking funds. I had found then, as I have frequently found before and since, that the actual increments to the various sinking funds did not follow the estimated increments and that year by year these funds were in deficiency or else in excess of the true accretions. In the nature of things this must be so. The earnings of investments can never be prophesied accurately in advance over twenty years, or forty years, and for this and other reasons no sinking fund which I have investigated has been correctly built up in practice.

In order to do away with these inaccuracies as well as the dangers of fraud or loss in sinking fund transactions, it has now become the established practice in the states to handle new issues of bonds for governmental purposes as serial bonds, without sinking funds.

One of the questions which I wish particularly to bring to your attention in this paper relates to an alternative method for issuing sinking fund bonds which eliminates most of the inaccuracy and mystery and danger which are so frequently associated with sinking funds when handled in the old manner. This method includes annual payments into a fund which is kept separate and intact for the purpose of accumulating sufficient money to liquidate at maturity the bonds secured by the sinking fund. The annual payments, however, are calculated without reference to the earnings of the investments in the fund; they are equal por-

tions of the bond issue according only to the number of years the bonds are to run. For instance, taking an issue of a million dollars of bonds to run forty years, the payment into the sinking fund each year of the forty years would be twenty-five thousand dollars, viz.: $25,000.00 × 40 = $1,000,000.00.

This is of course simplicity itself—so far. It corresponds exactly with the annual payment of a portion of a serial bond issue, which might be identical with the above, viz.: maturity of $25,000.00 of bonds each year for forty years. Your question naturally arises now, "What is done with the interest upon the investment of the money in the sinking fund?" The answer is equally simple: This interest income is used to pay—so far as it goes—the interest outgo on the bonds themselves. That is to say, the interest earned the first year is not added to the sinking fund, but is deposited in banks to meet in part the payment of the first coupons on the bonds—for the first interest period—the remainder of the coupons being met by general or specific appropriations for interest according to the usual practice. For the second year the interest earned is similarly used, and so on for each year the bonds run.

This is sound as a financial proposition, for interest earned is used to pay interest due, while the annual appropriations for meeting the principal at maturity are regular and equal each year. Moreover this appropriation for the fund is easily computed and cannot be forgotten or misappropriated without immediate evidence of such a fact becoming known to the most muddle-headed councilman or citizen.

Up to this point the elements of the problem are simple enough, but now come somewhat more intricate considerations. It is evident that so far as the payments of principal go, each year of the life of the bonds lays an equal tribute upon the taxpayers; no more in one year than another—perfectly fair to the taxpayers of all the years. When we consider the interest payments, however, it is apparent that the earnings on the investments in the sinking fund during the first year will be only one-fortieth as much (or thereabouts) as the earnings on the investments in the fund during the last year of the series. Inasmuch as the taxpayers are required to provide for the interest outgo not met by the interest income, the burden upon the taxpayers for this difference of interest will be heavy in the early years and grow lighter

each year as the series progresses—as the sinking fund investments grow larger and as the interest thereon (income) increases year by year.

The interest payments, therefore, by this plan would be unfairly thrown upon the taxpayers of the earlier years. In this fact the method suggested corresponds almost exactly with the conditions surrounding actual serial bond issues at present. For instance, the following chart (C—figure I) exhibits an issue of $2,000,000.00 3½% serial bonds, running twenty years, $100,000.00 of which mature each year. The interest required upon the bonds outstanding decreases from $70,000.00 for the first year to $3,500.00 for the last year. The total requirement from the taxpayers for this issue varies, therefore, from $170,000.00 for the first year (including the serial maturity) to $103,500.00 for the last year, which is an unfair load upon the early years taxpayers and a lightening of the burden upon the later years taxpayers.

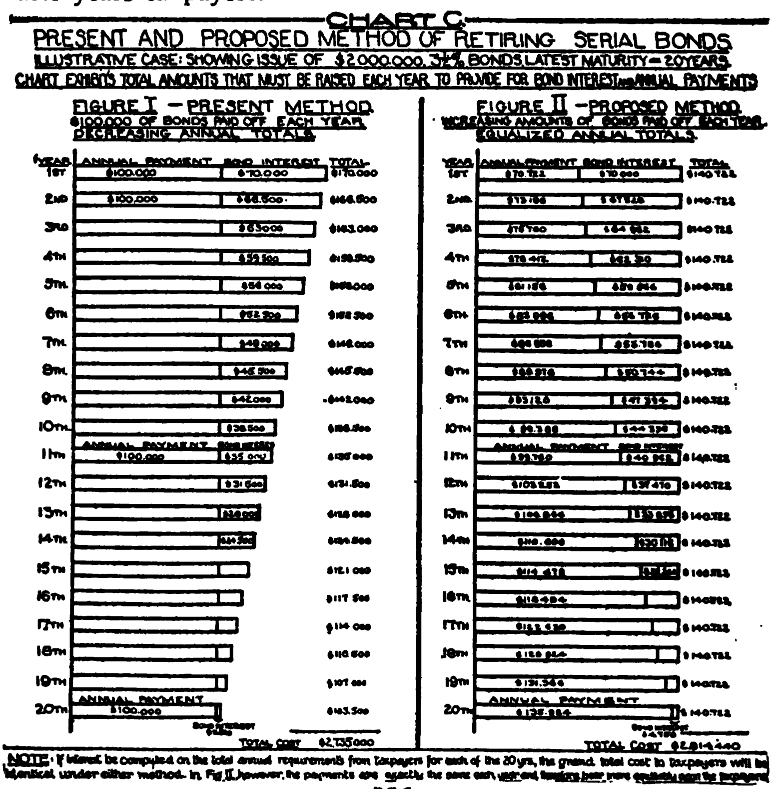


Figure II of chart C exhibits in contrast a method of equalizing the total requirements for capital repayments plus interest payments. By reducing the amounts of serial bonds which mature annually in the early years and correspondingly increasing the amounts which mature annually in the latter half of the period, an equalization of total tax requirements can be brought about as shown clearly in figure II. In this way the first half of the period supplies an increasing total requirement from about 3½% of the total issue, maturing the first year, to about 5% maturing the eleventh year and to about 6.8% in the twentieth year. Meanwhile, the interest requirements decrease from $70,000.00 the first year to about $4,750.00 during the last year, the average total requirement annually during the whole period being about $140,700.00.

It will be noted by comparing the totals of figure I with those of figure II that there is a difference, amounting to $79,440.00, in the grand total costs, apparently in favor of the figure I method over figure II. This advantage is, however, superficial only. It is not actual, for the reason that the taxpayers who furnish the money by the first method are obliged to furnish more money during the early years; therefore their bank accounts, or investment capacities, are diminished and they lose interest over the whole period exactly equal to the difference shown, provided the interest rate on these lost investments be figured at the same rate as the bonds bear, viz.: 3½%. If, on the contrary, such interest earnings—as they are likely to be in ordinarily good business—would be greater than 3½%, then the apparent loss would be transferred from figure II method to figure I method.

This explanation leads me to an emphasis upon a fallacy frequently met with by accountants in eulogies of serial bonds by promoters and others wherein it is stated that by using the serial bond method immense savings of interest are obtained to the government issuing the bonds over what would be required if a sinking fund method were used. This argument is entirely fallacious. If it were true it would be equivalent to the boot-strap-pull theory of lifting oneself. That it is unsound is evident when one thinks out the matter to clear conclusions. Whatever saving of interest there may be to a government corporation as such, i. e., a municipal corporation or a state government or a national government, there will be at least the same shrinkage of interest

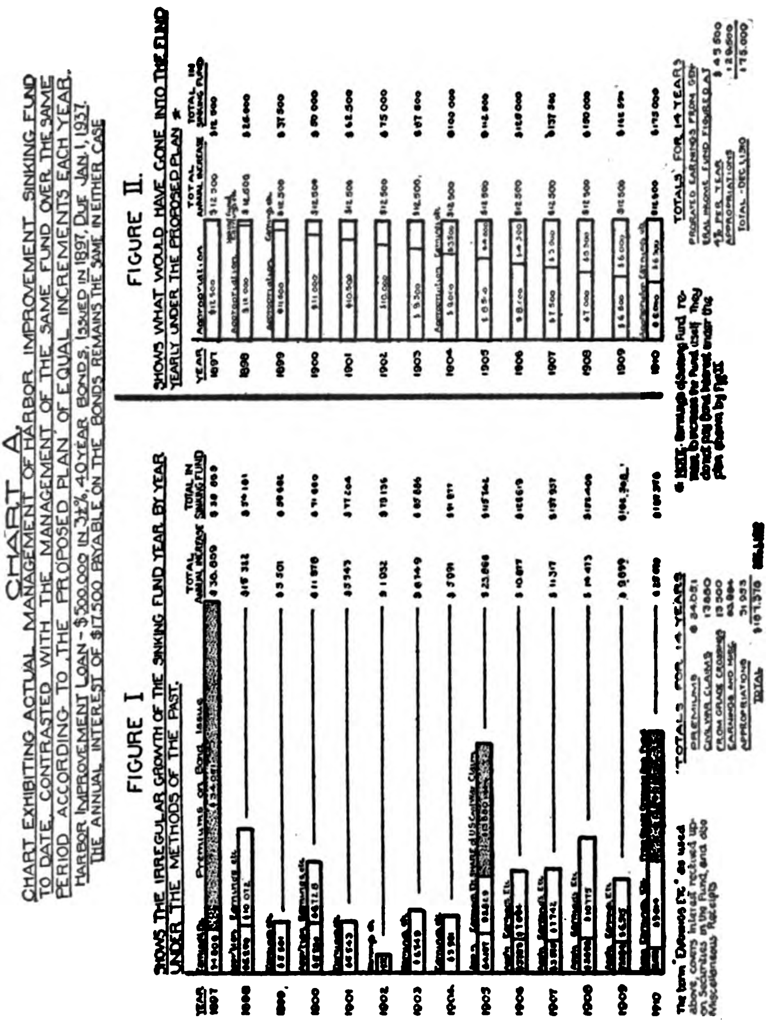
in the shape of capital earnings lost to the individual citizens who pay the taxes to that government corporation or division.

There will be no gain to the taxed body of citizens as a whole by savings of interest from the use of serial bonds instead of sinking fund bonds; but there are many other and extremely important gains which are sufficient to justify the use of serials in place of sinking funds wherever the law permits it. These gains are in the line of simplicity, of accuracy, of loss of all mystifying elements, of less danger—much less danger—of actual pecuniary loss through fraud or ignorance and in various other ways. Therefore, other things being equal, it is well to urge serials over sinking funds at nearly all times and in nearly all conditions of governmental financing, provided that such bonds are issued by the method shown in figure II of chart C and not by the method of figure I.

The question will naturally arise in your minds, "Why is not figure I just as good as figure II, if the interest problem is exactly equivalent when we consider the taxpaying bodies as a whole and take into consideration the individual loss or gain of their capital earnings?" The answer to this question necessarily is, that the taxpayers at the beginning of a twenty or thirty or forty-year period will be different individuals from the taxpayers at the end of such a period, and that it would be unfair and unsound to load the first taxpayers heavily and correspondingly diminish the burdens of the last taxpayers by big interest payments in the early years and light interest payments in the later years as is done at present in the majority of serial bond issues. It is evident, I think, that the procedure in the case of serial bonds should be materially modified as illustrated in my figure II in order to become thoroughly sound and entirely fair to all taxpayers in the series of years for which the bonds will run.

As an illustration of the contrast between sinking funds which are handled by the old method and similar funds handled by the new method here described, I submit chart A and chart B, which exhibit the actual increments of one of the Massachusetts sinking funds covering the period of fourteen years from 1897 to 1910, inclusive. The contrast between figure I of this chart and figure II is striking.

Chart B exhibits the same sinking fund with its varying increments during the same period by graphic lines. This chart makes

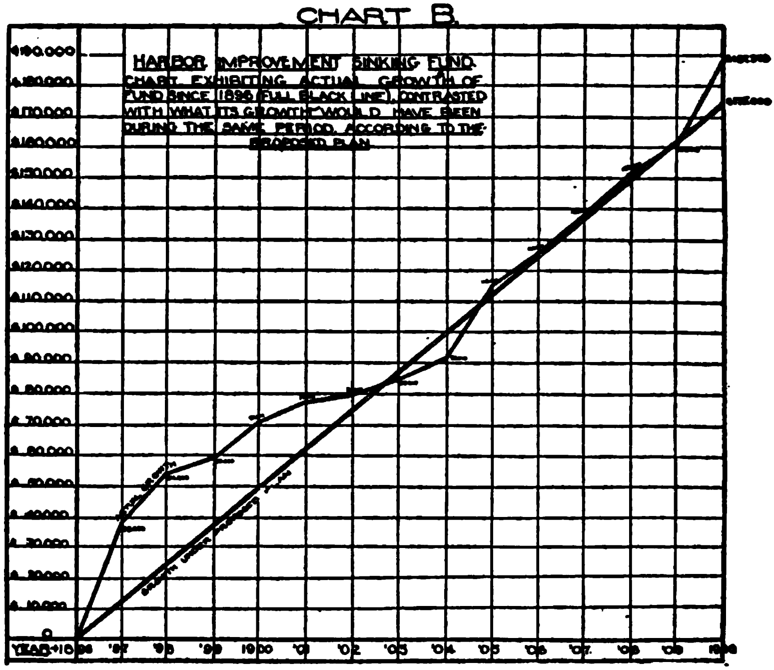


it evident that the sinking fund commissioners endeavored to keep the fund growing evenly by reducing or increasing the annual appropriations which varied from $2,556.00 to $5,250.00; while earnings and miscellaneous receipts of the fund varied from $1,932.00 a year to $10,775.00.

The Massachusetts sinking funds have always been exceptionally well handled and have been one of the points of honor of the commonwealth's conscience; therefore the variations exhibited

should be laid to faults of the sinking fund system, as such, under the old methods and not to faults of supervision by the managers of these funds.

CHART B.



Depreciation Reserves for Governmental Purposes

The second feature of this address I wish also to make as brief as practicable, although the intricacies of my subject will necessitate only a partial exposition of it.

The relationships between depreciation reserves and sinking funds are often misunderstood by the layman and not infrequently by the public accountant. Strictly speaking, there are no real relationships. They are actually entirely separate and distinct subjects and should not be related in accounting procedure, except as described below.

Sinking funds have to do with the repayments of borrowed capital. Depreciation reserves have to do with the keeping of assets intact, irrespective of the method by which the capital was provided for purchasing or constructing those assets.

While both relate to capital, as we see, sinking funds are always asset-offsets to liabilities on the contra side of the balance-

sheet, while depreciation reserves are always liability-offsets to assets on the other side of the balance-sheet. Both are offsets and therefore similar as far as that goes, but each is for a diametrically opposite purpose.

It should be evident to all accountants that depreciation of capital assets goes on continually in fact, whether or not such depreciation be recognized in the books of account. In every plant a day comes when depreciation must be provided for, out of reserves built up regularly from earnings or by assessments upon stockholders or by issuance of new capital stock or bonds with the proceeds of which to make good the worn out equipment and plant. Depreciation can never be escaped—it will take its toll in due time. The only question is, shall it be provided for correctly by annual reservations of profit separately set up aside from surplus, or shall it be permitted, as is so often the case, to run to seed without scientific provision at all and left for the subsequent unfortunate stockholders to provide for as best they may?

Depreciation reserves in governmental accounting are as necessary as in any other accounts, but owing to their intricacy and difficulty they are infrequently attempted and when attempted are usually unsuccessful. Only when the governmental accountant is thoroughly trained in such accounts and is maintained in office for a long time—many years—can there be success in such classes of governmental accounts. Therefore, owing to these complications, depreciation reserves are seldom met with in such accounts.

After experimenting with all kinds of accounts and all kinds of accountants in governmental service, I have frequently taken refuge in elemental simplicity as the only hope for municipalities. The moment the average government accountant in the states takes a hand in making alleged scientific reserves for depreciation he gets in at once over his head, and as he hasn't learned to swim in that current, he promptly asphyxiates and his "reserves" float down upon the stream hodge-podge—flotsam and jetsam, nothing else!

I have been utterly discouraged time and again, as many of you must have been, and have finally come to recommend elemental simplicity as the only safe and sound way of handling such accounts in the great majority of municipalities. I will

content myself, therefore, for the purposes of this address, by setting forth as clearly as possible what I mean by elemental simplicity in such accounts.

In the first place many if not most municipal accounts in the United States have no true balance-sheets, no correct series of fixed asset accounts and of course no corresponding depreciation accounts. In municipal industries—water-works, electric works, street railways, etc.—such accounts are sometimes attempted and it is only through these classes of undertakings that we may hope for success enough to lead to extension of such good methods to the ordinary classes of municipal fixed assets, such as buildings, equipments, sewers, parks, streets, etc., etc. At present such applications are, as I say, hopeless. They are even dangerous to attempt as they will surely lead to utterly mistaken statements of account when incorrectly applied.

My elementary simple method, then, is this: on the municipal balance-sheet make an absolutely separate division of fixed assets values from current assets values. Have in fact always a "double-account balance-sheet" with separate balancing surpluses. Have the upper part current assets and current liabilities with a current surplus—grand totals in balance. Have an under part fixed (or capital) assets and capital liabilities, with a balancing capital surplus (or "City of Blank account") which is strictly a balancing account only, not an available surplus in any sense of the word. This is the first fundamental requirement.

Next, see that the values of the fixed assets are set forth at cost, if cost be obtainable—all at cost, not depreciated. If cost is unobtainable, which is frequently the case, then start the new accounts at appraised values at the date in question but eliminate depreciation accounts in connection therewith. That is to say, the left side of the capital balance-sheet (in American fashion) will exhibit the cost values—or original appraised values if costs cannot be obtained—of the various classes of fixed assets.

Now comes my suggestion, made in the interest of ultimate simplicity and at the same time of accuracy and intelligibility of the statement. On the right hand (liability) side set up contrasted figures of each of the classes of assets based upon annual estimates of the present values for municipal purposes of these various properties. These estimated valuations will then be contrasted with the costs of these properties continually, and the

estimated appreciation or depreciation of the properties will be evident to the most mediocre intellect. Moreover, as the left side represents costs and the right side represents present estimated values, the latter may change with the changing opinions of succeeding administrations without danger to the fundamental accounts, as these changes in appraised values from year to year are reflected only in an appreciation and depreciation account, which acts as the balancing account at the bottom of the statement on the right side (liability side). This account is plus if the total estimated values above are less than costs, and minus if the estimated values above are greater than costs.

It may of course be frankly stated that this proposal smacks of despair rather than of hope for depreciation accounts in municipalities, and this may well be considered so for the moment. Criticism is also well taken that such a statement upsets the established relations and purposes of a capital balance-sheet, viz.: the contrast of capital liabilities with capital assets. To answer this criticism I must point out, as shown in chart D below, that a distinction is made in the capital division of the total balance-sheet between bonded or mortgaged or other relatively fixed liabilities and the fixed assets described above. The bond (and similar) liabilities occupy a separate division of the capital balance-sheet, offset in this division by the values of sinking funds already raised to provide for them—if there are such—and with a balancing account of their own, "net bonded debt" or similar title, to offset the difference between the two sides, the grand totals making a true balance in this subdivision. Down below comes the contrast between the cost values and the estimated present values of the fixed assets as a separate division of the balance-sheet by itself, as described above.

Chart D

Pro Forma Balance-sheet of a Municipality

City of Lynn

City Auditor's Balance-sheet

June 30, 1918

Current Accounts

Asset and Deficiency Accounts

Cash:		
In banks and offices		$59,188.19
Accounts receivable:		
Taxes, 1917		211,032.38
Street sprinkling, 1917		2,784.60
Moth extermination, 1917		124.66
Sewers, 1917		1,710.89
Sidewalks, 1917		2,859.66
Sewer assessments, unapportioned		....
Sidewalk assessments, unapportioned		....
Tax titles		13,481.66
Tax possessions		1,950.88
Apportioned sewer assessments		11,426.28
Apportioned sidewalk assessments		15,349.76
Departmental bills receivable:		
General departments		17,865.20
Commonwealth of Massachusetts:		
State aid	$42,210.72	
Military aid	1,952.00	
Soldiers' burials	1,950.00	46,112.72
Water accounts		2,487.55
Total available assets		$386,374.43
Estimated collections, 1918:		
Taxes, 1918		1,740,508.12
Taxes, 1918 (outlay)		23,010.00
Miscellaneous revenue, 1918 (estimated collectible)		316,419.46
		$2,466,312.01
Current deficiency (if appropriations are fully expended)		18,002.36
Totals (current)		$2,484,314.37

Liability and Reserve Accounts

Current debts:		
Temporary revenue loans		$1,345,000.00
Appropriation balances		1,094,649.55
Overlays:		
Reserved for abatements, 1917		6,702.38
Premiums:		
Serial bonds (inside)	$....	
Serial bonds (water)	....	....
Reserves:		
Real estate sales		380.61
Excess receipts from sale of tax possessions		279.24
Sewers apportionments (revenue, 1918 to 1926)		11,426.28
Sidewalk apportionments (revenue, 1918 to 1927)		15,349.76
Water revenue		2,487.55
State income tax, 1917		7,764.00
Fire losses, etc.		275.00
Totals (current)		$2,484,314.37

Capital Accounts

INDEBTEDNESS

Sinking funds: (cash and securities)		Bonded debt:	
For bonds within debt limit	$307,052.89	Bonds within the statutory debt limit.	
For bonds outside debt limit	295,800.11	With sinking funds....	$592,800.00
For water bonds	863,399.15	Serial bonds..........	1,696,900.00
	$1,466,252.15	Bonds outside the statutory debt limit.	
		With sinking funds....	473,500.00
		Serial bonds	606,300.00
		Water bonds.	
Net bonded debt (balancing account)	4,064,247.85	With sinking funds....	1,420,000.00
		Serial bonds	741,000.00
	$5,530,500.00		$5,530,500.00

FIXED ASSETS

Values at Costs (*Pro forma figures only*)		*Values at present estimates* (*Pro forma figures only*)	
Municipal lands (1).......	$2,757,623.00	Municipal lands (1)	$4,237,840.00
Municipal buildings	8,626,700.00	Municipal buildings	6,272,700.00
Municipal equipments	3,184,525.00	Municipal equipments	2,732,390.00
Sewers	4,213,900.00	Sewers	5,400,000.00
Parks	2,192,300.00	Parks	4,600,000.00
Streets	6,727,100.00	Streets	10,800,000.00
Etc., etc.		Etc., etc.	
			$34,042,930.00
		"Appreciation and depreciation account" (surplus, subtract)	6,340,782.00
Totals	$27,702,148.00	Net totals	$27,702,148.00

(1) Lands occupied by buildings, etc., not parks or streets.

Subsequent divisions of the balance-sheet cover trust funds and trust accounts, etc., also municipal industries' assets and liabilities, if handled as separate businesses.

In the balance-sheet exhibited—chart D—the current figures are actual, being taken from the monthly statement of the city auditor of Lynn, Massachusetts. The capital figures for indebtedness are also actual, but the fixed assets' figures are pro forma, having been written in by the author merely as illustrations.

It should be explained that the figures for lands, buildings, etc., are supposed to be consolidated and to be supported by innumerable aggregates and balances in subsidiary real estate and fixed assets' ledgers wherein all details both of costs and of present estimates are kept. It is further explained that municipal industries—separate businesses—should be separately stated on the gross balance-sheet with actual fixed assets and liabilities and actual depreciation reserve accounts, wherever such accounts are regularly and correctly kept.

As a final record for this regrettably incomplete paper, I quote the definition of depreciation given by the United States census, division of municipal statistics, etc., as follows:

"*DEPRECIATION*: Depreciation is a general designation of the gradual diminution in value which is caused by wear, decay, displacement or obsolescence in the value of buildings and equipment and of the sudden diminution which results from fire or other destructive forces. It is never actually or relatively the same for any two establishments, even of the same industry. For this reason it is impossible to frame concise, general rules for making allowances for depreciation which will not in their application be attended with a large margin of possible error. To use such rules without causing errors, those employing them must have for each individual establishment exact data based upon inspection, showing how far and in what respects its actual depreciation differs from that of the average establishment of its class."

I also quote from a previously published pamphlet my own remarks relating to depreciation reserves in public service companies, etc.

"Much experience under the conditions in which public service corporations are acting in most municipalities convinces the writer that it is fundamentally necessary that questions of depreciation should be carefully considered, accurately worked out, and regularly entered upon the books of all such corporations. This being the case in private works, it is also necessary that municipally managed public services should have similar accounts. The reason in both cases is the same, viz., in order that fair rates may be established, that is, rates which will be just to the consumers and also fair to the plant. Such rates cannot be just unless full allowances shall have been made for deterioration of the plant or, in other words, for the capital losses which arise from depreciation. Such losses must be provided from income or otherwise they will require new capital. Therefore, they should be handled in the accounts as regular charges against income. This is most forcibly true in all plants which have to do with electricity, for in such plants depreciation during past years has been rapid, and changes in the art have frequently demanded that machinery should be scrapped even though the machines themselves might be in excellent physical condition. Electric street railway companies, electric lighting companies and tele-

phone companies are fast coming to see the necessity for proper and complete provisions for depreciation. Gas companies are next in importance in this particular, while water-works may be considered last. It must be noted that it is frequently the fact that appreciation in the general value of any water-works, due to increase of population in its territory, may offset in great part, and sometimes may even exceed, the losses by depreciation which occur during a given period. Therefore, while the emphasis which is here laid on depreciation accounting is accepted in full by electrical concerns today, and accepted in part by gas companies, it is nevertheless true that water-works have not as a rule acknowledged the necessity for such accounting or, at least, have not adopted such accounts in their bookkeeping systems. The same arguments which have compelled the use of depreciation accounts in electrical concerns will, in my opinion, compel their use ultimately in water-works. This will come about mainly through the instrumentality of state supervising boards, which will require uniform reports from all municipalities and from their departments, in which a water department is frequently included.

"Just as the gas commissioners of Massachusetts have required definite allowances for depreciation in the accounting of municipally operated plants, so, in due time, similar requirements will be promulgated for municipal water-works.

"If the writer has stated the facts correctly, and if his deductions in regard to the future are true, it is evident that proper accounting for depreciation should be undertaken promptly in all such plants. The best way to handle these matters, in the writer's opinion, is by a series of depreciation reserve accounts, that is, by reserve accounts which correspond to the different classes of assets, and which appear in the balance-sheet as liabilities (credit balances). Every monthly closing should provide for items to be charged to expense and at the same time credited to these various reserve accounts. Each of these charges should be based upon a carefully calculated percentage which will vary according to the estimated life of the particular class of asset. Whenever depreciation is made good by actual expenditure for renewals or reconstruction, such amounts should be charged against the corresponding depreciation reserves and thereby the balances remaining in these reserve accounts will show whether

or not sufficient monthly allowances are being made year by year to provide for depreciation losses, shown by the actual expenditure for renewals and reconstructions. The necessity for depreciation reserve accounts being evident, the writer urges that particular attention be given to them in all public service accounting, and trusts that, in future editions of the census classifications, statements of liability accounts will be included in which will be set forth in detail a depreciation reserve for each of the various classes of deteriorating assets."

Capital Accounts of a Municipality*

By Henry B. Fernald, C.P.A.

The question of how to treat the capital accounts of a municipality is one which hardly existed in the small towns where many of us grew up. We can, perhaps, look back to the town with a thousand people where there was no water or sewer system except what we each had for ourselves. There were only dirt roads which were dragged or filled when they became impassable. There were no public parks or playgrounds because we had miles of open country at our command. The school was the principal public building, and it was only such as the town really needed and felt it could afford.

The running expenses of the town were also on the most moderate scale. Expenditures for police or fire departments were negligible. Collection of ashes and garbage was unknown. But whatever expenses there were, they were matters in which the whole town felt a deep personal interest because every man realized that dollars were hard to get and that every dollar spent was going to come out of the taxpayers, of whom he was one.

Such a condition is vastly different from that which exists in the majority of our municipalities today. It is not necessary to cite our great cities, with their millions of people, their great public utilities and their road and sanitary problems, with finances so complicated as to require the most careful and thorough accounting under the supervision of trained experts.

We can rather take the typical community of a comparatively few thousand people which has not yet grown so large that the ordinary citizen cannot feel that he should have some general understanding of how its affairs are managed and what is done with the money. The citizens have not yet felt that the affairs of the town are so large that they must turn them over to paid experts, but want still to maintain their active local management. At the same time they are finding themselves very much bewil-

*A paper read before the annual convention of the National Association of Comptrollers and Accounting Officers, at Atlantic City, New Jersey, June 20, 1918.

dered by the rapidly-growing volume and variety of expenditures —the improvements contracted in one year, completed in another, perhaps assessed in the third, and no one is quite sure when or how they are ever paid for. The assessments against property owners are continually growing. At the same time the tax bills show an increasing charge for interest, sinking fund and retirement of bonds, and the financial statements show an ever-growing bonded indebtedness which some day must be paid. The people want their good roads, their sewers and water and their adequate police and fire protection. Perhaps some of them want all these in the hope that someone else will pay the taxes to cover them. The best citizens, however, recognize that they can only have these by paying for them, and they ask and are entitled to have such statements of the town's accounts as will be readily intelligible and will enable them to understand what it is costing for what they get.

It is from this standpoint of the information to be furnished in financial statements, rather than from the standpoint of the bookkeeping and accounting problems involved in the handling of the accounts themselves, that the matter is here discussed.

The title of this paper uses the wording "capital accounts," although it must be recognized that the municipality has no capital accounts in the same sense in which that term is applied to the accounts of a business corporation. In corporate accounting we usually have certain items of plant and equipment of a rather fixed nature which are to be considered the capital assets, which the corporation employs as the basis for conducting its business. They are not themselves being liquidated, but it is through their employment in the business that the earnings of the corporation are realized. This is not, however, the condition with regard to the so-called capital assets or capital resources of the municipality. Of course, for water-works or other utilities operated by the municipality the capital accounts should be viewed in the same light as are those of corporations, but this is not the condition which exists with regard to roads, sewers, parks, etc.

In the ordinary form of a corporation balance-sheet we find the following:

GENERAL FORM OF CORPORATION BALANCE-SHEET

Assets		Liabilities	
1. Current assets...	$......	1. Current liabilities.	$......
2. Deferred charges..	......	2. Deferred credits..	......
3. Fixed or capital assets	......	3. Fixed liabilities..	......
		Total liabilities...	$......
		4. Capital and surplus	......
Total assets......	$......	Total	$......

The current assets and current liabilities are what bankers or ordinary creditors are primarily interested in, as indicating the current condition and the probability of prompt payment of loans or bills. The banker or creditor is not looking to a condition where the fixed or capital assets will have to be liquidated so that he can get his money, although he does, of course, give consideration as to what margin will exist in the capital assets in case it should be necessary to liquidate the corporation.

The deferred charges will include various items of expenditures made, which have not been charged against operations to date but will be chargeable against future income. They are expenditures which can be considered to have a value to be realized out of future business, even though they are not represented by some tangible physical property.

The fixed or capital assets will include the plant, equipment and other property which presumably is not being liquidated but must be retained and kept in a fair state of repair and subject to more or less constant renewals and replacements in order to enable the corporation to conduct its business properly.

Anyone who has had any extended experience of business affairs, realizes the importance of this feature just mentioned, viz.: that unless the plant is properly maintained the corporation cannot operate efficiently and obtain its proper income. One of the most important features of corporate accounting is, therefore, the question of depreciation, and it is not considered that the accounts of a corporation are properly stated unless they include each year the requisite allowance for depreciation of plant and equipment. While current repairs and replacements which are charged against operating expenses will cover a considerable part

of keeping the plant in proper shape, there are, nevertheless, many features which do not occur regularly from year to year, but are to be represented by replacements or renewals over a period of five, ten or twenty years. There must, therefore, each year be set aside out of earnings such an amount as will provide for the replacement of the plant which is being worn out or exhausted, or will provide a fund to take its place and maintain intact the capital of the corporation.

The laws are very strict in charging directors with responsibility of seeing that dividends are only paid out of earnings and that the capital of the corporation is not impaired thereby. Unless proper deduction from the earnings is made for depreciation as well as for any other expense in the business, the directors may find themselves personally responsible for dividends paid.

Because of this responsibility which rests upon the directors and because depreciation is a factor to be taken into consideration in calculating taxable income, there has been steady progress in corporate accounting toward placing depreciation on a proper, a consistent and, as nearly as possible, a scientific basis.

It was only a few years ago that it was not uncommon to find corporations issuing their reports with the comment that no charge had been included for depreciation, but today it is almost universally recognized that depreciation is the medium through which the income of a corporation must be made to pay for the capital assets employed in the business.

For the municipality this same idea should be applied to any public utilities, such as water, gas, etc., which are operated, because the accounts will be on a false basis unless they show each year what it is costing the municipality to conduct the utilities. This cost cannot be shown unless the proper allowance is made for depreciation.

While there might be cases in which a municipality would deliberately decide to charge a rate which would not give a sufficient income to pay all the expenses and provide the proper allowance for depreciation, there can, however, be no question that, even in such case, the accounts should clearly show whether or not the income from the utility was sufficient to pay its cost. If there is a deficit in the operating accounts of the utility which must be made up from general tax moneys, the condition should be clearly recognized and the item should be cared for as such. The

taxpayer should not be deluded into thinking that the utilities are paying for themselves, when in fact there may be a continually growing deficit which must some time in future years be paid and cared for.

Leaving aside, then, the accounts of utilities which are a subject for consideration according to customary business standards, and turning to roads, parks, sewers, etc., we find an entirely different condition to exist. There is no income received from these. They are constructed for the general use and benefit of the people of the town, and their original cost, together with their maintenance and upkeep, must be paid for out of the funds raised through taxation, except in so far as some part of their original cost may be paid by assessment against particular property benefitted thereby. Of course, their entire cost may not be met out of taxes or local assessments in the year in which they are constructed, but, even though bonds may be issued, sooner or later these bonds must be paid out of taxes or local assessments.

For the business corporation the primary consideration is whether it has in the past and can in the future make the necessary earnings to enable it to pay all its expenses, cover the depreciation of its plant and equipment and provide for needed improvements and extensions thereto and have a balance available for dividends. In its financing, whether temporary or permanent, the dominant question is as to the probable future earnings.

For the municipality this question does not exist. There is the very bothersome problem of how to do all that there is to be done without levying taxes and assessments which will raise a storm of protest; but, granted the proper authorization for the expenditures and payments, the moneys are bound to be forthcoming. So, while the corporation should earn, or at least show ability to earn, the money in order to spend it, the municipality must spend, or show the need of spending, the money in order to raise it.

As regards the ordinary running expenses of the town, the situation is comparatively simple. The administration which incurs them knows it must pay them and must stand or fall on the record it makes, since these must be met out of the current year's taxes. The big problem comes in the question of how much of an indebtedness, existing or contracted for, it may have received from the past and how much it should or can pass on to the future.

Our laws have done much to regulate this. The Pierson acts in New Jersey have accomplished great good, and, with the supervision which is being given by the state commissioner of municipal accounts, prevent many abuses. But in spite of all that may and can be done by proper legislation and supervision, there is nothing that can take the place of the enlightened public opinion of the citizens of the town itself.

Perhaps we have a very cheerful and comforting statement issued somewhat as follows:

Assets		Liabilities	
Revenue assets:		Current liabilities:	
Cash	$50,000	Accounts payable	$50,000
Taxes receivable.	100,000	Notes payable...	200,000
Sundry accounts...	50,000	Bonds outstanding..	1,500,000
Improvement accounts	200,000	Total liabilities	$1,750,000
Capital assets:		Surplus	1,000,000
Town properties.	2,000,000		
Sinking funds...	350,000		
Total assets...	$2,750,000	Total	$2,750,000

The "surplus" of $1,000,000 is generally accepted as showing that the finances of the town are in excellent shape. Many assume that the extensive road improvements which may have been authorized are to be paid for out of this "surplus." Then, perhaps, a new finance committee comes in and begins to look at these "assets" to see where the money is to come from. The revenue assets are good, but practically all the money they will produce is already covered by existing liabilities. Improvement accounts represent merely certain moneys spent on improvements, all of which have been borrowed through notes or bonds. Part will be collected from property owners by direct assessment and when collected will serve to meet a part of the indebtedness. The balance of these improvement accounts will be assessed against the town-at-large and must then be paid, and so represents, not an asset to be realized, but a liability to be met. Then the capital assets are looked at only to find, of course, that there is no amount to be realized from the "town properties," and that the sinking funds represent at best no more than was owed for prior years' sinking fund accumulations.

By this time, faith in the million dollar surplus is very much shattered and the so-called "assets" are looked at with great distrust.

Perhaps then they begin to make some such calculation as the following:

Total liabilities		$1,750,000
Realizable assets:		
Cash	$50,000	
Taxes receivable in the near future	75,000	
Improvement assessments from property owners	100,000	
Sinking funds	350,000	
Total realizable		575,000
Leaving an excess of liabilities over realizable assets		$1,175,000
Then they add the probable amount required for projected improvements—estimated		225,000
and find an amount to be raised by future taxation of		$1,400,000

This brings them practically to the conclusion that the town has very little in the way of assets except its power to tax.

The above may overstate conditions, but it is not very far from the actual happenings in many cases.

It is a fact that many towns have been lulled into a false sense of security by showing a large surplus as a result of including town properties as assets in the balance-sheet.

Perhaps if depreciation were clearly enough recognized and we could depend upon its being properly applied, it might be well to set up our town properties at cost less depreciation and show the capital surplus which would thus appear to exist. Perhaps some day this may be done, but unless it is done right it will be worse than useless.

In any event, it seems a decided question as to whether it is not a mistake to try to follow too closely the form of corporate balance-sheets, since the fundamental bases of corporate and municipal accounting are so different. The writer is inclined to believe that there is a distinct value in having the municipal statements so arranged that they will bring out clearly some of these

fundamental distinctions and thus impress these differences upon the minds of business men when they are looking at the financial statements of the town.

This would be done by a statement which may be sketched as follows:

MUNICIPAL BALANCE-SHEET

Assets		Liabilities	
Revenue assets:		Liabilities against revenue	
(Classified)	$......	assets	$......
		Revenue surplus	......
Total revenue assets..	$......		$......
Improvement accounts:		Improvement accounts:	
Assessments receivable..	$......	Accounts payable.......	$......
Advances for improvements to be assessed against property benefitted or against town-at-large	......	Notes payable	......
		Improvement bonds	......
Total improvement accounts	$......		$......
Capital accounts:		Capital accounts:	
Cost of bonded properties	$......	Bonds outstanding	$......
Less—amounts raised by assessments or taxes..	......	Less—sinking funds.....	......
Balance to be raised by future taxes	$......	Net bonded indebtedness..	$......
Total:		Total:	
Realizable assets	$......	Liabilities	$......
To be raised by future assessments or taxes..	......	Revenue surplus	......
Grand total	$......	Grand total	$......

Contracts outstanding or improvements and construction authorized in an estimated amount as follows:	
For improvements to be assessed against the property benefitted or against the town-at-large........................	$......
For town buildings or other property......................	......

The above is only a brief outline to bring out the essential features of such a statement. Details should, of course, be filled in, and supporting schedules should be attached to show the actual condition.

When it is recognized that the bonded indebtedness of the town is not to be paid out of town properties or other so-called capital accounts, but out of the taxes of future years, a further

step is seen to be badly needed, viz.: that there should be a statement regularly carried to show the amount for debt service which is to be raised in each succeeding year. Not only should such a record be kept, but its publication each year should be required, so that the citizens may see clearly the amount of future years' taxes which are already mortgaged to pay for the facilities they now enjoy.

Furthermore, the amount raised each year for this debt service should not merely be lumped under a single head, but should be separately stated according to the purpose for which the indebtedness was originally incurred. It is only by doing this that the people can be made to realize what it is costing them each year for schools, roads, sewers, parks, etc.

A paper of this kind cannot attempt to present the full solution for the many problems which exist in the proper treatment of the capital accounts of the municipality. It can only try to call attention to some of those problems, particularly from the standpoint of the citizen and the taxpayer. Much has already been accomplished, and the recognized standards of municipal accounting today reflect the greatest credit upon those who have labored so long and so effectively in this movement. But there is much still to be done, and probably nowhere more than in trying to bring home to the people a clear understanding of the meaning and effect of the capital accounts.

Examination, For Credit Purposes, of a Book Publishing House*

By Harold S. Morse

It has been said that commercial credits are based upon three C's, character, capacity and capital. Accounting deals only with the last of these factors and the function of the accountant's report is to assist the banker in intelligently determining the amount of credit to which the borrower is entitled, it being assumed that the banker has already satisfied himself as to the moral risk involved.

The banker looks to the accountant for a complete and dispassionate statement of assets and liabilities—the former segregated to show, first, those which represent available cash or will rapidly and in the ordinary course of business be turned into cash; second, those which represent permanent investments in plants and equipment, stock in subsidiary companies, etc., and ordinarily could not be liquidated either in whole or part without impairing the earning power of the business or its future development; and, third, those which primarily represent expenditures chargeable in the ordinary course of events against the operations of future periods.

Current liabilities should likewise be separated from funded or long term obligations and the former should be classified to show amounts due merchandise creditors, bank loans, accrued or unwithdrawn salaries, etc. Secured liabilities should be specifically ear-marked and preferably shown as deductions from the assets against which they apply, and particular attention should be given to any contingent liabilities as endorsors or guarantors, important contractual obligations, etc.

The banker is also keenly interested in the earnings over a period of years as an index of the prospective borrower's progress and probable ability to meet his obligations promptly as they come due.

A discussion of the details of a report for credit purposes is considerably simplified if an imaginary investigation in a particu-

*A thesis presented at the May, 1918, examination of the American Institute of Accountants.

lar industry is used as an example and, for the purpose of this article, we will assume the case of a book publishing house.

The ordinary assets and liabilities of such an institution may be expressed in condensed form somewhat as follows:

Balance-sheet

As at ...., 19...

Assets			
Cash			000
4% Liberty bonds—due 1942		000	
Less special bank loan		000	000
Trade accounts receivable		000	
Less reserve		000	000
Trade notes receivable undiscounted			000
Interest receivable accrued			000
Merchandise inventories—			
Paper	000		
Sheet stock	000		
Bound stock	000	000	
Less reserves		000	000
Total current assets			000
Plates and copyrights		000	
Office furniture and fixtures		000	
Total fixed assets			000
Advances to authors		000	
Advances to employees		000	
Expense supplies inventoried		000	
Interest, insurance and taxes prepaid		000	
Total deferred charges			000
			000

Liabilities			
Accounts payable—			
Merchandise creditors	000		
Authors' royalties	000		
Officers and employees	000	000	
Notes payable—			
Banks and note-brokers	000		
Trade notes	000	000	
Interest and taxes accrued		000	
Total current liabilities			000
Net worth			
Capital stock—			
Authorized	000		
Issued and outstanding		000	
Surplus—			
Balance, ————, 19—	000		
Net earnings for period, after deduction of taxes	000		
	000		
Less dividends paid	000		
Balance, ————, 19—		000	
Total net worth			000
			000

Note.—In addition to the liabilities stated above the company is contingently liable as endorsor on notes receivable discounted to the amount of $000.

Taking up the various assets and liabilities in the order in which they appear above, the important points to be considered and reported upon are as follows:

Cash

The procedure in verifying bank and petty cash balances is generally understood and requires no detailed explanation here.

Care should be taken, however, to eliminate from the cash balance all salary advances, I.O.U.'s, etc., which may be carried therein.

Liberty Bonds

Bonds on hand should be inspected and care taken to see that all unmatured coupons are attached or otherwise properly accounted for. In cases where bonds are held by the bank as collateral, the verification of both the securities and the loans against them should be made by direct correspondence with the bank. The bonds should preferably be shown on the balance-sheet at cost or market values, whichever is lower, or, if cost is used, the market value might well in any case be shown as a parenthetical note. The amount of any loan secured by the bonds should be shown as a deduction from the security values.

The comments in regard to the treatment of Liberty bonds apply equally to any other readily marketable securities in which the surplus funds of the company have been invested.

Trade Accounts Receivable

The character of the outstanding accounts will be found to vary a great deal in different publishing houses and in all cases they will require careful scrutiny. This is particularly true of instalment accounts, which are frequently found in publishing houses handling standard sets, encyclopedias, etc. The percentage of loss on instalment accounts of this character is very high, as, while theoretically the books are recoverable if payments are not made, as a practical matter the cost of recovery is usually more than the value of the second-hand books and a substantial reserve against such accounts is an invariable necessity.

Many of the publishers maintain retail book stores and practically all do a more or less important mail order business. Losses on these small accounts are frequent and, in the aggregate, important, and, even in the case of sales to dealers, credit losses are by no means infrequent. A careful examination of the accounts themselves, supplemented by an investigation of the policy of the publisher in past years in regard to writing off uncollectible accounts, will materially assist the accountant in estimating the realizable value of the accounts for the purposes of his report.

Aside from the question of bad debts, the accountant should exercise great care to discover accounts representing consigned

goods rather than bona-fide sales. While these consignment accounts are most common among publishers of educational books, they are not infrequently found in any publishing house. They should, of course, be eliminated entirely from accounts receivable and set up as a part of the bound stock inventory at manufacturing cost (paper, printing and binding), exclusive of royalty, unless the publisher pays royalties on such consignment sales, which is very rarely the case.

Trade Notes Receivable

The notes on hand should be examined and those under discount at banks should be verified by correspondence. No overdue paper should be included under this heading on the balance-sheet, and the accountant will also find it profitable to investigate unusually long term or renewal notes thoroughly as these will not infrequently be found to represent long standing accounts with small book-stores the eventual collection of which is more a matter of hope than probability.

The contingent liability as endorsors on discounted notes should be shown as a foot-note on the balance-sheet.

Interest Receivable Accrued

No special comments appear to be necessary in regard to interest receivable accrued except perhaps the rather obvious one that only interest which is expected to be actually collectible should be included. Where the interest accrual appears on the books under examination, however, it not infrequently includes interest on obligations both the principal and interest on which are of extremely doubtful collectibility.

Merchandise Inventories

Book publishers rarely maintain their own printing and binding plants, as their production requirements are ordinarily too spasmodic to permit the even flow of work necessary for the economical operation of such an establishment. The composition, printing and binding is therefore almost invariably given out to various printers and binderies, the publisher being in this respect in a similar position to any other merchant who has his goods manufactured for him according to his own specifications.

In publishing a new book the publisher usually buys the paper, furnishes the plates and has the entire first edition printed at one time. The sheets are then delivered to the bindery, where they

are kept in stock awaiting orders for binding. Ordinarily the binding (with the preliminary operations of folding and gathering) is done in comparatively small quantities as necessary to replenish the stock of bound copies used to fill current orders.

The inventories of a book publishing house can be verified completely with no great difficulty, particularly if the accountant's examination is made directly at the close of an inventory period. The bound stock on hand can be tested thoroughly by actual count or, for that matter, may usually be checked completely without any great expenditure of time.

The manufacturing department of a publishing house always maintains some form of sheet stock record for each title, which is started with the total quantity of sheets printed for the entire edition, deductions being made as lots are bound and the balances of sheets on hand are brought down. These balances on hand can usually be supported by reports from the bindery and, while some adjustment is usually necessary when the edition of sheets is exhausted, the discrepancy is usually small. The paper inventory is usually unimportant, as purchases are practically made for each new publication and the only balance on hand ordinarily represents purchases for new books not yet printed or small lots left over from previous publications. These quantities may also be verified by reports from the printers showing stocks held by them.

The cost values of paper, sheets and bound stock are easily ascertained, as the printing and binding charges are either a fixed amount per copy or readily reducible to that basis, and the paper used in an edition is all purchased at one time. Plate charges are usually treated entirely separately from the manufacturing cost of the books and do not enter into the inventory values. Care should be taken to see that the royalty is also excluded except in the very rare instances where publishers pay royalties on the copies bound instead of those sold.

The most important factor in the valuation of these inventories for credit purposes, however, is that of obsolescence. The salable life at standard prices of most current fiction is very short, although there are, of course, marked exceptions to this rule. In many cases, however, a book is unsuccessful in pleasing the public fancy and large stocks of both bound volumes and sheets are left on the publishers' hands. The bound stock in such cases is closed

out eventually to some jobber of this class of books and the sheets sold to some publisher of cheap editions, in both cases usually at a fraction of the original cost. Educational books have, as a rule, a very much longer life, but these also are not infrequently supplanted in the public favor by some better or more modern work.

The accountant may profitably make extensive comparisons between the stocks of individual titles on hand and the sales for several preceding royalty periods, as reported to the authors, observing particularly not only the total sales, but the trend of these sales, i. e., whether there is apparently a constant even though moderate demand, or whether the sales are rapidly decreasing. Such an investigation will be of material help in determining the amount of reserve necessary to cover probable losses in the liquidation of the inventories.

Plates and Copyrights

The so-called plate cost of a book represents the expenditures for composition, electrotypes, half-tones and color plates, cover dies, original drawings, copyright fees, etc. While book plates will wear out in time, the element of wear and tear is not an important matter except in the case of standard works for which there is always a steady demand. The vast majority of books become unsalable long before the signs of wear on the plates become marked.

There are almost as many methods of depreciating book plates as there are book publishers. Many of the old established houses either show no asset whatever on their books for plates or carry them at some more or less nominal fixed value and charge all expenditures of this character directly to expense as they are made. Others either depreciate them gradually over a fixed number of years or revalue them title by title each year. Plates for educational books are, as a rule, written off over a much longer period than in the case of fiction, and rightly so, and in the case of some publishers of standard literature like sets of Shakespeare, Thackeray, Dickens, Scott, etc., they are not written down at all. This latter practice is certainly to be neither recommended nor approved, although in this case the element of obsolescence is almost entirely absent and the depreciation is almost entirely a matter of wear and tear.

Fortunately most of the publishers are extremely conservative in their valuation of plates; but this rule, like most others, has exceptions and the accountant will do well to investigate the plate values by comparisons with the book sales in the same manner as suggested for the inventories.

Office Furniture and Fixtures

In a publishing house office furniture and fixtures will frequently be found to have been either written off entirely or carried at a nominal value. Where the cost of the office equipment has been capitalized, proper provision for depreciation should be made.

Advances to Authors

Competition among book publishers is fairly keen and in the past an author of reputation has had little difficulty in securing advances of considerable sums on account of a book to be written some time in the future and published by the house making the advance. These advances, while sometimes termed loans, are usually as a matter of fact repayable only out of the royalties on the new book "when, as or if" published. While these promised books are usually written, they are not always as successful as had been hoped; and then, too, the span of human life is uncertain. The custom of making these advances is dying out, but is not yet obsolete, and among publishers it is rather the rule than the exception to find a few of these loans which have been standing on the books sometimes for several years. The value of most of these advances is problematical and they can certainly by no stretch of the imagination be considered as current assets, although they are usually shown as such on statements prepared by the publishers themselves.

A slightly different character of royalty advance is that frequently made at the time of the acceptance of a new book for publication. This kind of an advance is part of the agreed upon consideration for the publishing rights and is covered by the contract with the author. Like the first advance, this is only repayable out of the royalties earned by the book, but in this case there is a book and if it is not sufficiently successful to cover the advance, the loss is merely a part of the publishing risk.

Again, a publisher occasionally pays a flat sum to the author in lieu of all royalties and the usual practice is to set this amount

up on the books and gradually extinguish it by credits representing the usual royalties on the book.

It should be borne in mind that the kinds of royalty advances described above apply as a rule only to the books against which they are made and are not deductible from royalties due the author on other titles published by the same house. As the author has usually only one account in the royalty ledger which is credited with his total royalty earnings and in which the advance may also appear, the credit balance of the account may not represent the full amount of the liability to him and the necessary separation must be made in order to show on one side of the balance-sheet the liability for royalties and on the other side the deferred charge representing the advance.

While the banker is not so directly interested in the deferred charges shown on a balance-sheet as in the current assets and liabilities, this deferred group should certainly not be allowed to serve as a resting place for bad debts in any form, and advances which are not reasonably certain to be liquidated in due time by royalty credits should be either written off or offset by a suitable reserve.

Other Deferred Charges

Accounts due from officers and employees may in some cases represent temporary loans, etc., which will actually be returned in cash, and in such cases the balances should properly appear on the balance-sheet as a current asset. Employees' Liberty bond subscriptions furnish an unmistakable example of this kind, the amount advanced being in this case secured by the bonds themselves and the account being liquidated by regular payments.

The majority of employees' debit balances, however, represent advances against salaries, commissions, traveling expenses, etc., and in the ordinary course of events will be transferred to expense rather than to the bank account. Balances of this kind are therefore generally looked upon as prepayments of future expenses rather than as current assets.

Inventories of expense supplies obviously are an asset of an entirely different character from the stock of merchandise and should be shown on the balance-sheet in the true character—a deferred charge against future operations. The unexpired portions of discount on bank loans, insurance premiums and taxes likewise primarily represent prepayments of future expenses,

although either of the first two might under unusual conditions conceivably be liquidated to some extent in cash.

Accounts Payable

The liability to merchandise creditors should be tested by comparisons with the monthly statements rendered by the printers, binders, paper dealers and other important vendors. Printing and binding bills, particularly during the month or two immediately prior to the balance-sheet date, may well be checked with the manufacturing department records with the two objects of satisfying the accountant that bills have been duly received and entered covering the printing of new sheets and additions to bound stock and testing the accuracy of the number of copies bound, as this latter information usually plays an important part in the calculation of the royalties due to authors. The entries in the books subsequent to the date of the balance-sheet should also be inspected for the purpose of locating any expense bills of importance applicable to the previous period.

Royalties are usually calculated and paid at the end of each six months' period, although a few publishers make only annual settlements with authors. The usual method of determining the copies of each title sold during the period is shown by the following equation: opening inventory + copies bound — (closing inventory + copies given away for review and other non-royalty copies) = copies sold. Some of the more progressive houses check this result by an analysis of their entire sales according to titles. When this analysis is made the sales of each book are further classified according to the terms of the royalty contract, i. e., separating export sales, etc., which take different rates of royalty. Where the sales analysis is not maintained the separation of special sales must be made from memorandum records kept for the purpose or by reference to the accounts with customers to whom such sales are made.

In addition to the royalties on book sales, special payments may be due the author for his share of receipts from dramatic or motion picture rights, syndicate sales, etc. These are not as a rule kept under very close control and omissions are sometimes inadvertently made. The accountant may find himself well rewarded if he asks a few judicious questions of the company

officers regarding the titles on which such sales have been made during the period and checks the information thus received with that shown by the books of account.

The matter of advances to authors and their importance has been commented upon previously.

No special comments appear to be necessary regarding the credit balances of accounts with officers and employees.

Notes Payable

The amounts and maturities of all outstanding notes should be verified by correspondence with the holders and the amount of such obligations given in settlement of trade accounts should be stated on the balance-sheet separately from bank and other loans.

Interest and Taxes Accrued

No specific comments regarding interest and taxes accrued appear to be necessary, except that the item of taxes should include the amount of federal income and excess profits taxes payable out of the net earnings to the date of the balance-sheet.

Net Worth and Earnings

While the banker is interested in the total excess of all assets over liabilities—net worth—his attention is usually most keenly fixed upon the relation of the current assets to current liabilities; and, from his point of view, the strength or weakness of a statement lies almost entirely in this comparison. He will be apt to pass over the plates and other fixed assets as of no value except as a part of the undoubtedly large goodwill value in a long-established publishing house and as an indication of the conservativeness of the business policy.

Statements of earnings, preferably covering a period of years, convey important information regarding the profitableness of the enterprise and consequently its probable ability to liquidate its obligations as they fall due. Where the publisher operates one or more retail book stores, a subscription book department (instalment business), etc., the profits or losses from the operation of these departments should if possible be shown separately from the general wholesale business, as these departments are not infrequently unprofitable and represent a constant drain upon the business as a whole.

The foregoing represents by no means the last word on the subject of an examination of a book publishing house for credit

purposes but the most important considerations peculiar to the business have, in the writer's opinion, been fairly well covered and the accountant who intelligently conducts such an examination along the lines suggested may be reasonably sure of finally presenting the banker with statements and supporting comments which will be of material assistance in determining the line of credit to which the publisher is justly entitled.

The Journal of Accountancy

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A. P. RICHARDSON, Editor

EDITORIAL

Ethical Publicity

At the recent meeting of the American Institute of Accountants, upon recommendation of the committee on professional ethics, the following rule was added to the rules of professional conduct:

9. In the event a member shall be requested so to do by the committee on ethical publicity, he shall thereafter submit all proposed circulars or other instruments of publicity to it for a period not exceeding two years, and he shall not issue or permit the organization with which he is identified to issue any circular or other instrument of publicity without first submitting a copy thereof to the committee on ethical publicity.

The institute also authorized the appointment of such a special committee as that mentioned in the additional rule of conduct.

Those who are familiar with the growth of accountancy in the United States will realize how important a movement may be begun by the adoption and enforcement of such a rule as that which we have mentioned.

In the early days of the profession the great majority of practising accountants found it necessary, or believed it to be necessary, to cry their wares so that all might hear. The public did not know what a public accountant was and did not seem to care to learn. The accountant fully recognizing the value of his calling, and also with a pardonable consideration of the condition of his pocket-book, felt it incumbent upon him to make known his value and to induce the public to take advantage of his services.

There arose from this natural desire for advertisement various plans of attracting attention. We have the frank adver-

tisement of accounting services which has been generally discarded and is almost universally recognized as being not only unethical, but also non-productive.

And we have the circular letter.

Of all the instruments potentially evil which have been devised in the name of advertisement, nothing is so notable as the circular letter. It goes its devious ways in the cloak of the secrecy of the United States mails and it finds its way to the ear of the executive officer or director who it is intended should be reached.

In the beginning of the circularization movement it was undoubtedly true that circularizing paid in general business, and there are adepts of the advertising art who still maintain that circularizing pays. Perhaps it does in business, but it certainly does not and should not pay in professional matters.

Yet there are members of the institute and many other accountants besides who still cling with a kind of superstitious faith to the circular letter.

Now, accountancy is a profession—even the most materialistic practitioners admit it. We are all imbued with the idea that we must uphold the standards so that no one can ever cast the slightest shadow of doubt upon the professional nature of accountancy. Therefore the institute feels that something should be done to check the use of circulars soliciting business.

A professional man worthy the name does not solicit clients—so the committee on professional ethics believes, and most accountants will agree—but unfortunately there are still among us those who tout for business. If one should ask them if they were professional practitioners they would claim to be, but their methods are certainly unprofessional and their ideas somewhat gross.

The committee on professional ethics has had before it within the last two years a great quantity of circular letters emanating from different offices, and has come to the conclusion that something must be done. The solicitation of clients is objectionable and shows a lack of that professional and fraternal spirit which should characterize all public accountants everywhere.

Now comes the appointment of this special committee and the adoption of the rule which all members of the institute will be expected to observe, knowing that if it is not observed charges

will be preferred and accused members will be brought before the council for trial.

We heartily approve the idea of the appointment of such a committee and believe that much will be done to clean house in the profession.

There are not many offices which are guilty of the propagation of circular letters, but there are some and those few must be convinced of the error of their ways.

The committee is not charged with the duty of approving the dissemination of useful accounting literature. Its duties are concerned with efforts to attract clients by direct approach. Of course, the distribution of pamphlets even of great educational value might be construed as seeking notoriety, and no doubt it does achieve that end to some extent, but it is with the frank drumming for business that the committee is concerned and on that subject it can exercise salutary influence.

When so much is good in a proposition it may seem captious to criticise adversely, but we may be permitted to express wonder and fear at the name of the committee. If it is not too late we would yet suggest that the awesome sounding "ethical publicity" be laid away and in its place appear some plain and simple term such as censorship. Everybody knows what censorship means, but there are a good many of us who are in some doubt as to the propriety and accuracy of the term "ethical publicity."

Standardization of Accounting Procedure

At the 1917 meeting of the American Institute of Accountants a resolution was passed calling for the appointment of a special committee to consider the question of the propriety or impropriety of including interest on investment as an element in cost of production. A great many accountants felt that the appointment of such a committee was slaying the slain, but in order that both sides of the question should be heard the whole institute approved the passing of the resolution. For some years there has been a small but vociferous minority of the membership which has clung to the generally discarded idea that interest was properly an element of cost.

The report of the committee was submitted at the annual meeting of September 17, 1918, and inasmuch as The Journal of

ACCOUNTANCY has published a good many articles on the subject of the inclusion of interest, we have asked and received permission to publish the report of the special committee.

During discussion of the report one of the members of the institute, who has consistently and persistently adhered to the theory that interest should be included in cost, expressed dissatisfaction with the nature of the report and asked that in publishing the report there should be some explanation of the scope of the committee's investigations.

During the discussion two or three members suggested that the two schools of thought were not really so seriously at variance as they appeared to be. These members thought that nearly every accountant would recognize the value of the inclusion of interest in statistical statements or other compilations intended purely for intra-company use.

After prolonged argument it seemed to be the general opinion of the members present that while the report of the committee from an accounting standpoint was perfectly correct, something might be said in favor of the inclusion of interest and similar items for comparative and statistical purposes, provided such items were not carried into the financial accounts or presented to the outside world, particularly the banking community. Indeed, we do not know that any accountant has ever denied the value of such statistical uses of interest.

We publish herewith the text of the report which was signed by the following members of the committee: Hamilton S. Corwin, chairman; Charles S. Ludlam, W. B. Richards, A. Pyott Spence, Seymour Walton.

Your committee on "Interest in relation to cost" has had one long meeting at which it had the benefit of the extreme views of Mr. Clinton H. Scovell, the sponsor for those who advocate the inclusion in production cost of interest on investment, in which Mr. Scovell very fully set forth the views of those who favor such procedure. The views of the committee on this question which are at variance with those of Mr. Scovell may be, as to certain points, briefly stated as follows:

There has been a great deal written and said on this subject, much of which is purely academic, but a practical, concrete definition of cost is "expenditure for production." Interest on investment is not an expenditure, but is at best only an anticipation of profits and, as such, has no logical standing in the computation of production cost.

If the theory is applied in practice, it is necessarily an arbitrary calculation, based not upon any established fact, but upon some one's vision of what particular interest rate would be properly applicable in the premises, and after the amount is so determined, injected into the calculations of actual expenditures, and so added to assets.

The inclusion of interest on investment as a part of the production cost must result in one or the other of two conditions:

First, a false statement of assets and income; or

Second, the creation of a reserve account, estimated to be equal to the amount arbitrarily added to the assets and the income.

It is, of course, assumed that no accountant would wish to present a false statement of the assets and income of any concern, and, therefore, only the question of the creation of a reserve to offset the suggested artificial inflation of the assets remains to be considered.

As such, in a statement of assets and liabilities, it must be deducted from the valuation at which materials and supplies, and finished goods on hand and in process, and any other items included in the inflation, are carried in the books. If not actually deducted on the face of the balance-sheet, a person having knowledge of finance and accounting (for instance a banker) will mentally deduct this reserve in forming his opinion of the value of assets. Hence the work and trouble expended in the calculation is futile so far as a statement of assets and liabilities is concerned, and only leads to confusion instead of simplicity.

The credit account or reserve which is set up as contra to the debit included in cost can be kept in equilibrium only by a periodic calculation of the amount of the false or arbitrary figure that has been included in the cost of goods sold, which amount must be first estimated, for it could never be determined definitely, and then debited to the reserve and credited to profit and loss, to offset the amount of such items that were prior to sale included and carried in cost. Hence the additional expensive detailed bookkeeping is entirely futile in that it has no eventual effect in a true statement of profit and loss.

Having no final effect upon either the balance-sheet or the profit and loss account except to confuse them, it is of no value whatever in a statement of condition or results. The suggested practice reminds one of the hillside exploits of the "Gallant Duke of York" and his famous "ten thousand men."

Under the federal tax law it is not permitted to deduct from profits reserves for inventories, etc., and no matter how patriotic one may be, any accountant who would recommend to a client that he arbitrarily and artificially increase his profits in order that he may pay as high as eighty per cent. thereof to the government, must have great faith in the child-like simplicity of human nature.

But the advocates of the practice say that it is a necessary item in the determination of the selling price. But even if so, why include it in production cost? It is no more necessary to that end than numerous other items which must be taken into consideration in establishing a selling price, provided the state of the market would afford a selling price based upon such a computation instead of on supply, demand and competition. For instance, such a calculation involves expenses of selling, expenses of administration, expenses of financing, and expected profit. No one would seriously advocate the inclusion of all these items in cost and if they must be calculated "on the side" and added to the production cost in order to determine a selling price, there seems to be no logical reason why the "side" calculations should not include the entire desired profit in one motion. It only complicates the calculation first to include a portion of the profit in production cost and then deduct from the total expected profit the anticipated portion (another estimate) previously absorbed. This is only another instance of the futility of the practice.

One of the supposed minor claims of the advocates of the practice is that it is necessary in order to establish a comparison of cost with others in like business, or the different plants of the same concern under different conditions of investment. That argument is hard to follow and there are always other elements of difference that the item of interest on investment

would not equalize. Furthermore, when those others with whom it is desired to compare costs are competitors, one is not likely to know their methods of computing costs or the elements involved and therefore comparison is impossible, whether or not interest on investment is used as an element by them.

In conclusion, it is the opinion of your committee that the inclusion in production cost of interest on investment is unsound in theory and wrong, not to say absurd, in practice.

Following the main debate on the question of interest and cost which—by the way, continued to crop up at short intervals during the convention—a resolution was proposed and unanimously adopted calling for the appointment of a special committee on standardization of accounting procedure. This committee is expected to consider all questions of procedure brought before it, and to make recommendations from time to time on vexed questions in the hope that ultimately there may be established something approaching uniformity of procedure throughout the country.

There are many questions upon which accountants differ, and inasmuch as accountancy is not and never can be an exact science, there must always remain questions upon which there will be various shades of thought. Consequently a committee on standardization can never bring about standardization in everything, but there is an opportunity for fine constructive work, and we welcome the appointment of the committee in the belief that it will do much to bring about reforms which are obviously needed.

American Institute of Accountants

Annual Meeting

The regular annual meeting of the American Institute of Accountants was called to order at 8:30 A. M., Tuesday, September 17, 1918, at room 708, Washington Loan & Trust Building, Washington, District of Columbia.

In the absence of the president, George O. May, vice-president, was elected to the chair.

In the absence of the secretary, Donald Arthur of Montana was elected secretary pro tempore.

Members holding proxies of other members were requested to file them with the secretary.

On motion duly seconded it was resolved that the meeting adjourn to convene at 2:30 P. M., at the Marlborough-Blenheim hotel, Atlantic City, New Jersey.

The meeting adjourned.

The adjourned meeting was called to order at the Marlborough-Blenheim hotel, Atlantic City, New Jersey, at 2:30 P. M., Tuesday, September 17, 1918, the president, W. Sanders Davies, presiding.

The report of the president was read and accepted.

The report of the council including the report of the executive committee was read and accepted.

On recommendation contained in the report of the council that the year-book should be considerably reduced in size in view of the cost of paper and printing and the necessity for conservation, it was resolved that the year-book should be limited to contain only the proceedings, lists of members, condensed reports of committees, constitution, etc.

Another matter mentioned in the report of the council was a recommendation received from the committee on ethics calling for the appointment of a standing committee with power to censor circulars and other advertising matter of members.

It was unanimously resolved that the recommendation of the committee on ethics be approved, and that the president be authorized to appoint the committee called for by the resolution.

A special committee appointed by the president to consider the question of interest and cost presented its report which, after discussion, was accepted and approved.

It was moved that the meeting approve, ratify and commend the reply made by the government of the United States to the Austro-Hungarian peace offer. The motion was carried unanimously by rising vote.

The report of the treasurer and the report of the auditors were read and accepted.

The report of the committee on constitution and by-laws was read, and it was resolved that the proposed amendments should be discussed seriatim.

The first proposal, that article II, section 2 (b) of the constitution should be amended by omitting the words "a member or members of the institute," and substituting therefor, "a practising public accountant," was carried unanimously, and it was further resolved that there should be inserted at the close of the paragraph the following words: "The determination of who shall be considered as practising public accountants shall be made in all cases by the board of examiners."

The proposed amendment to article IV, section 1 of the constitution calling for the omission from the first line of the word "ten" and substituting "eleven," and for the addition of the word "nominations" at the end of the section was unanimously adopted.

The proposed amendment to article I, section 6 of the by-laws by adding after the words "three consecutive meetings of the council," "unless such absence shall be attributable to the service of the United States in time of war" was not approved.

The amendment to article IV, section 4 of the by-laws by adding after the words "fiscal year" the sentence, "No dues shall be paid by members and associates of the institute while they are engaged in military or naval service of the United States or its allies during time of war," was unanimously adopted.

The meeting unanimously adopted the recommendation of the committee that in article V of the by-laws after section 1 should be inserted a new section as follows:

"Section 1 (a). No person whose membership shall have been forfeited for non-payment of dues or other sum due by him to the institute may be reinstated, but a member or an associate who shall resign while in good standing may be reinstated by a three-fourths vote of the members of the council present and voting at any regular or special meeting of the council, providing the person applying shall submit with his application for reinstatement the amount of dues and assessments, subscriptions, etc., not in any case to exceed $25.00, which would have been payable by him if he had continued in membership from the time of resignation to the date of application for reinstatement. No person shall be considered to have resigned while in good standing if at the time of his resignation he was in debt to the institute for dues or other obligation."

The report of the committee on administration of endowment was read and accepted.

The report of the special committee on collections was read, and, after some amendment in regard to the contribution from Massachusetts, was accepted.

It was resolved that an effort should be made to bring the amount of subscriptions up to $150,000. Upon call for subscriptions an amount of $5,590.00 was subscribed.

The meeting adjourned.

The meeting was called to order at 9:10 P. M.

A paper entitled *The Accountants' Bit in the American Expeditionary Forces*, by C. B. Holloway, was read.

A paper entitled *Accountants and the Food Administration*, by Herbert G. Stockwell, was read.

Page Lawrence of Colorado gave an extemporary review of the work of the auditors connected with cantonment construction.

His remarks were followed by a general discussion.

The meeting adjourned.

The second day's session was called to order at 10:45 A. M., Wednesday, September 18th.

Invitations to hold the 1919 annual meeting in their cities were received from commercial bodies in Springfield, Mass., Philadelphia, San Francisco, Columbus, Buffalo, St. Louis, Cleveland, Cincinnati and Syracuse. After discussion it was unanimously resolved that the meeting of 1919 should be held in Cincinnati, Ohio.

A motion calling for the appointment of a special committee on standardization of accounting procedure, consisting of five members, was adopted.

A paper entitled *An Examiner's Impressions*, by John P. Archer, was read.

The meeting adjourned.

The meeting convened at 2:30 P. M.

A paper entitled *Accounting for Cantonment Construction*, by William H. West, was read.

The secretary read a letter from H. Ivor Thomas of California, explaining that it was impossible to attend the meeting, and tendering his resignation as a member of the council.

His resignation was accepted with regret.

Upon report by the committee on collections that the labors of the committee were at an end, the committee was discharged.

The report of the committee on nominations was read.

The following officers and members of council were elected:

President: Waldron H. Rand.

Vice-presidents: Charles S. Ludlam and E. G. Shorrock.

Treasurer: Adam A. Ross.

Council for five years:
Harvey S. Chase,
Page Lawrence,
J. D. M. Crockett,
Ernest Reckitt,
W. Sanders Davies,
W. A. Smith,
Edward L. Suffern.

Council for three years:
Walter Mucklow,
F. F. White.

Council for two years:
A. M. Smith,
Frederic A. Tilton.

Auditors:

Charles Hecht,
Henry C. Magee.

A unanimous vote of thanks was extended to the retiring president, W. Sanders Davies, for his two years of service.

A vote of thanks to the committee on meetings was unanimously carried.

A telegram of goodwill and greeting was received from the Dominion Association of Chartered Accountants in convention at Montreal.

The president and secretary were directed to reply on behalf of the American Institute of Accountants.

Upon motion it was resolved that an expression of appreciation of the services rendered by J. E. Sterrett to the profession and nation should be recorded and conveyed to Mr. Sterrett.

The meeting adjourned.

American Institute of Accountants

Council

Meeting of September 16, 1918.

The regular annual meeting of the council of the American Institute of Accountants was called to order at 10 A. M., Monday, September 16, 1918, at the Marlborough-Blenheim hotel, Atlantic City, New Jersey.

Minutes of the preceding meeting as printed were approved.

The record of mail ballot No. 7 was read and approved as part of the minutes.

Upon motion it was resolved that the council adjourn and convene as a trial board.

The complaint of the committee on professional ethics against Albert Star Moore, a member of the institute, was considered. The complaint alleged that Albert Star Moore had conducted himself in a way discreditable to a public accountant in that he obtained his membership in the American Institute of Accountants through fraud, as follows:

That said Moore became a member of said institute by virtue of his membership on September 19, 1916, in the American Association of Public Accountants; that said Moore obtained his membership in the American Association of Public Accountants by virtue of his membership in the New York State Society of Certified Public Accountants and the possession of a certified public accountant degree of the state of New York; and that said Moore obtained his membership in the New York State Society of Certified Public Accountants and said certified public accountant degree of the state of New York by fraudulently concealing, when he applied for said degree, that he had been convicted of a felony and had served a sentence therefor.

The defendant did not appear, but was represented by counsel.

After consideration of the evidence it was unanimously resolved that Albert Star Moore be expelled from the institute.

A complaint by a member against two members practising as a firm alleged that said two members had made attempts to get into communication with employees of the complainant's organization with the idea of inducing such employees to enter the employ of the defendant firm, and that such conduct was unprofessional.

After hearing of evidence the attitude of the defendant firm with respect to the employment of accountants already in the employ of other members of the American Institute of Accountants, or with respect to attempts to influence such employees to change their employment without the knowledge of their employers, was found to be improper and to merit an admonishment against a repetition of the conduct under consideration.

It was resolved that the names of the parties concerned in this case should not be published.

The meeting adjourned.

The trial board reconvened at 2:30 P. M.

The board considered complaint made by a former pupil of a member of the institute against said member to the effect that a course of instruction conducted by said member was not conducted in good faith, and also a complaint of the committee on professional ethics that said member had conducted himself in a way discreditable to a public accountant by soliciting business from clients of other members.

After the hearing of testimony and evidence it was resolved that the case be dismissed.

It was further resolved that the member against whom the complaint had been made should be directed to confer with the committee on professional ethics before putting into effect any proposed methods of solicitation.

The board considered charges brought by two members of the institute against four members of the institute practising as a firm.

The complaint alleged that the firm with which the defendants were associated had certified to a balance-sheet in which items of approximately $230,000 due from associated companies, and $150,000 due from officers and employees had not been separately shown, but had been included under a general heading, "Accounts and notes receivable." The total including the above items was slightly in excess of $1,000,000.

It was alleged that the defendants' firm had prepared a more or less detailed audit report and a condensed balance-sheet, both of which were signed and delivered to the client. Even the detailed report, it was alleged, failed in several instances accurately to state the transactions with the associated companies as separate and distinct from regular trade debtors and creditors, and the condensed certified balance-sheet, which was used with the banks from which the company was borrowing, included in total with the trade accounts receivable and payable the balance of accounts receivable and payable with the associated companies and officers and employees. It was alleged that no explanation had been given that the amounts as shown were due from or to other than regular trade debtors and creditors. It was alleged that the balance-sheet actually did deceive the banks with which it was used, and that the complaint was brought at the suggestion of the bankers.

In addition it was alleged that the inventories were shown at market instead of at cost, and raw materials, work in process and finished stock were shown in one total as "merchandise."

It was further alleged that the reserve which was shown on the company's books to reduce the inventory from market to cost was included on the liability side of the balance-sheet with other general reserves in such a way that the bankers considered it similar to a general reserve out of surplus, and therefore considered the merchandise as stated on the asset side of the balance-sheet to be at cost.

It was alleged that the item which appeared on the balance-sheet as "investments" consisted chiefly of stocks representing ownership of subsidiary companies, except about 20 per cent. of the total, which consisted of treasury stock.

The balance-sheet produced in evidence was acknowledged by the defendants, who argued that there had been no misrepresentation and no intent to deceive, and that the question of arrangement of the balance-sheet was more a matter of technique than of principle.

After consideration of the evidence it was resolved that the member who had actually signed the balance-sheet in question should be suspended for six months from date, and that the other three members of the firm against whom complaint had been made should be suspended for three months from date.

It was resolved that the board record its appreciation of the way in which this case was presented by the complainants in regard to the withholding of the name of the client, and that the board also express its disapproval of the introduction of the client's name by the defendants.

It was resolved that the names of persons concerned in this case should not be published.

The meeting adjourned.

The trial board reconvened at 8:30 P. M.

It was resolved that the trial board adjourn and that the council reconvene.

Reports of officers and committees were read and accepted.

The meeting adjourned.

Meeting of September 19, 1918.

The regular meeting of the council of the American Institute of Accountants was called to order at 10:15 A. M., Thursday, September 19, 1918, at the Marlborough-Blenheim hotel, Atlantic City, New Jersey.

A. P. Richardson was re-elected secretary of the institute.

The following were elected to the executive committee: H. S. Corwin, W. Sanders Davies, J. E. Masters, John B. Niven, E. W. Sells.

The following committee on professional ethics was elected: Carl H. Nau, chairman; J. D. M. Crockett, J. Porter Joplin, T. Edward Ross, Charles H. Tuttle.

Vacancies on the board of examiners were filled by the election of the following members:

For the term of three years: W. P. Hilton, B. D. Kribben, John B. Niven.

At the suggestion of certain members of the board of examiners it was resolved that the council recommend to the board of examiners that questions in actuarial science should not be compulsory at examinations. This was urged in view of the fact that certain state boards which had used the institute's questions had taken exception to making actuarial problems compulsory.

It was resolved that the recommendation of the committee on professional ethics that a new rule be added to the rules of conduct should be approved.

The following rule was approved:

"In the event that a member shall be requested so to do by the committee on ethical publicity, he shall thereafter for a period of two years submit all proposed circulars or other instruments of publicity to it, and he shall not issue or permit the firm or organization with which he is identified to issue any circular or any other instrument of publicity without first forwarding a copy thereof to the committee on ethical publicity."

The meeting adjourned.

Income Tax Department

EDITED BY JOHN B. NIVEN, C.P.A.

The 1918 revenue bill, which is to contain the new income tax, excess profits tax and war profits tax laws, is now, as drawn by the ways and means committee of the house, before congress, but a discussion of its terms in these pages would be idle and even confusing without the text of an enacted statute to deal with, because of the liability to radical changes at the eleventh hour,—of which we have a precedent in the 1917 law.

The only general rulings bearing on income taxes published since last month are two in number. The first, T. D. 2754, amplifies the regulations regarding allowances for depreciation. According to the regulations (regulations 33, article 159 and elsewhere) depreciation should be estimated on the cost of physical property; but the new ruling provides that, for property acquired prior to March 1, 1913, the fair market price or value at that date is to be regarded as the equivalent of cost; but this value will, in default of proof to the contrary, be the original cost reduced by depreciation to March 1, 1913.

A recent letter from the commissioner has been made public that is of interest to war plants or others working in two shifts or continuously. Where machinery and equipment are thus operated more than a normal number of hours, a greater rate of depreciation than normal is justified and will be recognized by the department if the circumstances are first presented to the commissioner and a decision obtained as to the rate or rates applicable in individual cases.

The second of the treasury decisions published, T. D. 2755, provides that only active depositaries of public moneys and surety companies recognized by the treasury department are acceptable as custodians of or security for replacement funds for property requisitioned for war use or lost or destroyed through war hazards—the accounting for the proceeds of which as income is deferred under previous rulings of the department—see T. D. 2706 in the June issue, and also 2733 in the August issue.

TREASURY DECISIONS

(T. D. 2754, August 23, 1918)

Income Tax

Basis of allowances for depreciation

Section 12(a) of the act of September 8, 1916, as amended, to which section 5(a) is similar, provides that net income shall be ascertained by deducting from gross income, among other things:

Second. All losses actually sustained and charged off within the year and not compensated by insurance or otherwise, including a reasonable allowance for the exhaustion, wear and tear of property arising out of its use or employment in the business or trade.

A reasonable allowance for the wear and tear of property arising out of its use or employment in the business or trade is to be based on the

cost of such property or on its fair market price or value as of March 1, 1913, if acquired prior thereto. In the absence of proof to the contrary, it will be assumed that such value as of March 1, 1913, is the cost of the property, less depreciation up to that date.

This decision is supplemental to articles 159 to 169 inclusive, of regulations No. 33 (revised), which to any necessary extent are modified accordingly.

(T. D. 2755, August 26, 1918)

Income and excess profits taxes

Depositaries and sureties acceptable under T. D. 2706 of April 25, 1918, and T. D. 2733 of June 17, 1918

To facilitate compliance with the provisions of T. D. 2706 of April 25, 1918, which permits the establishment of a replacement fund in the case of property requisitioned for war uses or lost or destroyed in whole or in part through war hazards, applicants are notified that only active depositaries of public moneys and surety companies holding certificates of authority from the secretary of the treasury as acceptable sureties on federal bonds will be approved as sureties or depositaries under schedules B and C of form 1114, prescribed by T. D. 2733 of June 17, 1918.

Students' Department

EDITED BY SEYMOUR WALTON, C.P.A.
(ASSISTED BY H. A. FINNEY, C.P.A.)

INSTITUTE EXAMINATION, MAY, 1918

In regard to the following attempt to present the correct solutions to the questions asked in the examination held by the American Institute of Accountants in May, 1918, the reader is cautioned against accepting the solutions as official. They have not been seen by the examiners—still less endorsed by them.

ACCOUNTING THEORY AND PRACTICE
PART II

Problem 1

Smith, Hill and Davis form a partnership under an agreement that Smith is to have a salary of $200.00, Hill $150.00, and Davis $100.00 a month respectively. The profits are to be divided in proportion to the amount of business secured by each partner. The partners are to be individually responsible for any direct losses arising from their own business.

They are in business nine months, at the end of which time their books state as follows:

Smith's sales	$5,310.00
Hill's sales	3,100.00
Davis' sales	3,200.00
Net profits	2,468.50

They then decide to rescind the salary agreement, treating any salary drawn as an advance, but otherwise to divide the profits according to the original arrangement.

You find errors during the nine months' period, namely:

Office furniture, charged to operation	$65.00
Funds lent by Davis, credited to his salary account	400.00

and open items not entered on the books as follows:

Smith's salary (ninth month)	$200.00
Hill's salary (ninth month)	150.00
Advertising	27.50
Clerk hire	130.00
Telephone	6.00
Rent	50.00
Stationery	15.00
Accounts receivable, Smith's business, uncollectible	210.00

and that the sales represent a gross profit of 100% over cost of merchandise.

State the journal entries necessary to readjust the accounts; and prepare a corrected profit and loss account and a statement of the distribution of the profits.

Solution, problem 1

The salaries paid to the partners should have been charged, according to the original agreement, to profit and loss as an expense of the business. That they have not been so charged in arriving at the net profit of $2,468.50 is indicated by the following analysis:

Total sales, $11,610. As the problem states that the sales represent a gross profit of 100% over cost,

The gross profit must have been		$5,805.00

If the salaries had been charged to profit and loss, the salary deductions from the $5,805 would have been

Salary for Smith—eight months	1,600.00	
Salary for Hill—eight months	1,200.00	
Salary for Davis—nine months	900.00	3,700.00
Net profit		2,105.00

As this profit is less than the $2,468.50 shown by the books, and as no expenses of operation have been deducted, it must be assumed that the salaries have not been charged to profit and loss, and that the profit of $2,468.50 was the result of the following:

Gross profit on sales		5,805.00
Deduct:		
Expenses of operation	3,271.50	
Furniture charged to operation	65.00	3,336.50
		2,468.50

This analysis determines the expenses of operation, which are not stated by the problem. As a conclusion of the foregoing reasoning, the salary accounts, which are now to be considered as drawing accounts, are believed to be open, so that no entry is necessary crediting profit and loss and charging drawings. Moreover, the fact that Davis' salary for the ninth month has been put on the books, while the other partners' salaries have not been, indicates that the entries were made when the salaries were drawn. Hence the salary accounts can be considered drawings actually made; and since Smith and Hill have made no drawings during the ninth month, no entry in respect to these items need be made. If the salary agreement still obtained, adjustments would have to be made. Now that their nature has changed to drawings, adjustments are unnecessary.

The following journal entries should be made:

Office furniture	65.00	
Expenses of operation		65.00

To reverse the improper charge to operations.

Profit and loss	3,271.50	
Expenses of operation		3,271.50

To close out operating expenses.

Profit and loss	228.50	
Accrued accounts payable		228.50

To show the expense and liability for the following:

Advertising	27.50
Clerk hire	130.00
Telephone	6.00
Rent	50.00
Stationery	15.00
	228.50

Davis' salary account	400.00	
Davis' special loan account		400.00

To record properly Davis' loan.

It will be necessary to recast the profit and loss account because a correction must be made in Smith's sales. These entries should be made:

Smith sales	210.00	
Accounts receivable		210.00

To charge back to Smith sales his uncollectible sales, as agreed.

Smith drawing account	105.00	
Cost of merchandise		105.00

To charge back to Smith the actual loss on goods sold but not paid for.

Bearing in mind that the books before correction showed total sales of $11,610.00 and cost of merchandise (purchase account), $5,805.00, followed by $3,336.50, expense of operation, the adjusted accounts will show

PROFIT AND LOSS ACCOUNT

For nine months ending (date)

Cost of merchandise	5,805.00		Sales	11,610.00	
Less	105.00	5,700.00	Less	210.00	11,400.00
Gross profit on sales		5,700.00			
		11,400.00			11,400.00

Operating expense	3,336.50		Gross profit on sales	5,700.00
Less	65.00	3,271.50		
Advertising		27.50		
Clerk hire		130.00		
Telephone		6.00		
Rent		50.00		
Stationery		15.00		
Net profit for distribution		2,200.00		
		5,700.00		5,700.00

In distributing the profits, the $210 is deducted from Smith's sales because of the fact that the profit on this sale is eliminated from the total profits for distribution. The ratio and the distribution are as follows:

Partner	*Sales—ratio of distribution*	*Profit*
Smith	5,100	984.21
Hill	3,100	598.25
Davis	3,200	617.54
	11,400	2,200.00

It is found that all partners have overdrawn their profits, as follows:

	Smith	*Hill*	*Davis*	*Total*
Drawings	1,600.00	1,200.00	900.00	3,700.00
Profits	984.21	598.25	617.54	2,200.00
Drawings in excess of profits	615.79	601.75	282.46	1,500.00

Problem 2

The A company buys on January 1st 95% of the stock of the B company.

The balance-sheet of the latter company on that date is as follows:

Assets		Liabilities	
Property account	$500,000	Capital	$1,000,000
Current assets	850,000	Surplus	100,000
		Current liabilities	250,000
	$1,350,000		$1,350,000

The A company pays par for 90 per cent. of the stock and 120 for 5 per cent. of it.

During the next six months a doubtful claim of the B company, which prior to January 1st had been written off, turns out to be good and $5,000 cash is realized on it.

At the end of the first six months B company has made $100,000 net profit from operations, and a dividend of $200,000 is paid.

In making up a consolidated balance-sheet of A company and its subsidiary at January 1st (date of purchase), state, giving briefly your reasons, how you would treat:

(a) A company's interest in the B company

and at July 1st

(b) The doubtful claim recovered

(c) The dividend paid

(d) The interest of outside B stockholders in B company.

Solution, problem 2

The A company, in purchasing 95% of the stock of the B company acquired

95% of the capital stock		$950,000
and 95% of the surplus		95,000
Total		$1,045,000

for which it paid:

90% of $1,000,000 at par	900,000	
and 5% of $1,000,000 at 120	60,000	960,000
Excess of interest acquired over cost		85,000

Assuming that all of the assets of the B company were properly valued, the A company would be justified in placing this investment on its books at $1,045,000 with a credit to cash of $960,000 and a credit to surplus of $85,000. This is because the assets parted with by A are less in value than the stock acquired. In case of any doubt as to the valuation of B's assets, the $85,000 should preferably be credited to a special reserve.

Or the investment in B company could be carried on A's books at cost, $960,000. In any event the investment account would be eliminated in preparing a consolidated balance-sheet at either January 1 or July 1. In its place B's assets and liabilities would be taken up on the balance-sheet. There would be included in the surplus in the consolidated balance-sheet at January 1, the $85,000 excess of book value of B assets over purchase price.

If the investment was put on A's books at $1,045,000 with a credit of $85,000 to surplus, the collection of the $5,000 doubtful claim would require an entry on A's books debiting the B investment account with 95% thereof, or $4,750, and crediting surplus, in order to raise the investment account to book value. This recovery would increase the surplus of the consolidation $5,000, of which $4,750 would belong to the holding company and $250 to the minority. If the investment was put on A's books at cost, $960,000, A would make no entry for the collection of the account, as it would not be following the policy of keeping its investment account at the book value of the stock.

The $5,000 recovery is credited to surplus because B's balance-sheet does not show any reserve for doubtful accounts, thus indicating that when the account was charged off the debit was made against profits. If the charge was originally made against a reserve the credit for the recovery might be made to the reserve on B's books. In this case A would not make any adjusting entry. Since B's books would not show any increase in net worth, A would not increase the book value of its investment. This absence of reserves on B's books may indicate an overvaluation of B's assets and furnish an argument for crediting the $85,000 excess to special surplus or reserve on A's books rather than to surplus.

The dividend paid would not be treated in the consolidated balance-sheet at July 1, as it would already have affected the accounts from which the balance-sheet is prepared. If A follows the policy of keeping its investment account at book value it would, at the time of ascertaining B's profits, charge its investment and credit earnings with $95,000. When the dividend was paid it would credit the investment account $190,000 to show the reduction of its proportion of the assets remaining with B. The payment of the dividend would exhaust the surplus of B, with the exception of the $5,000 collection possibly credited to surplus; hence the only surplus, in addition to A's, appearing in the consolidated balance-sheet at July 1 would be the contingent surplus of $85,000 arising from the stock purchase.

The interest of outside B stockholders would be shown on the liability side under the caption of minority interest. It would be 5% of the $1,000,000 capital stock, plus 5% of the $5,000 collection if that had been passed to the credit of B's surplus.

That is, A's investment in B would show	954,750.00
and minority stockholders would own	50,250.00
of the net worth of B, which is	1,005,000.00

Problem 3

In auditing the books of a corporation you find that, in order to provide a sum to redeem a mortgage of $100,000 falling due at the end of 10 years, a reserve of $8,000 per annum has been set aside annually for three years, but that, contrary to intention, the company has failed to accumulate interest thereon. Assuming interest at 4 per cent. (convertible annually), what should have been the total accumulations to date, and what amount should now be set aside annually for the next seven years in order to complete the sinking fund? $(1.04)^7=1.31593$.

Solution, problem 3

The statement that "a reserve of $8,000 per annum has been set aside annually for three years" cannot properly be considered to mean more than that a mere book entry has been made crediting the reserve and charging surplus. A reserve must not be confused with a fund; hence it must be assumed that no cash has been set aside.

If there had been $8,000 set aside in cash at the end of each year for three years at 4%, the total accumulations at the end of the third year

would be determined by using the formula for finding the amount of an annuity.

$$A = I \div i$$

where A represents the amount of an annuity of $1; I, the compound interest on $1; and i, the interest rate.

$$\begin{aligned} \text{Now } 1.04^3 &= 1.124864 \\ \text{hence I} &= \ .124864 \\ \text{Then } 8{,}000\ A &= 8{,}000\ (.124864 \div .04) \\ &= 8{,}000 \times 3.1216 \\ &= 24{,}972.80 \end{aligned}$$

But the problem asks for the total accumulations "to date," and there is some uncertainty as to the date of the auditor's discovery of the failure to accumulate interest. If the date is the end of the third year, the accumulations would have been $24,972.80. But if the discovery of the failure to make fund deposits had been made at the end of the third year it would seem that the correction would also have been made at that time, the first of eight deposits being made at the end of the third year. Since only seven annual deposits are to be made, "to date" may mean at the end of the fourth year, after three credits had been made to the reserve and at the time when the fourth is about to be made.

In this case the three instalments accumulated would have amounted, if invested in a fund, to

$$\$24{,}972.80 \times 1.04 = \$25{,}971.71$$

The next problem is to determine what sum must be set aside annually for seven years to produce $100,000.

Since $1.04^7 = 1.31593$, an annual contribution of $1 would produce the amount of an annuity of $1, the formula for which is I ÷ i, or in this case, $.31593 ÷ .04, which is $7.89825.

If contributions of $1 will produce $7.89825, it will require $100,000 ÷ 7.89825, or $12,661.03 annually to produce $100,000 at the end of seven years.

The problem may mean that the company is to make a deposit of the $25,971.71 which should have accumulated at the end of the fourth year. On this assumption, the seven remaining deposits would be for equal amounts computed as follows:

Total fund required		100,000.00
Fund to date	25,971.71	
Interest to be earned thereon	6,890.74	
Total to which present fund will amount (24,972.80 x 1.31593)		32,862.45
Amount to be provided by seven instalments		67,137.55

$67,137.55 ÷ 7.89825 (see above) = $8,500.31

If the problem means that $8,000 per annum has already been set aside (a supposition which cannot properly be read into the word "reserve") but that no interest has been accumulated, the computation of the amount of the remaining seven contributions would be as follows:

Total fund required	$100,000.00
Sum to which $24,000 now on hand will amount in seven years:	
$24,000 x 1.31593	31,582.32
Remainder to be provided by seven instalments	68,417.68

It has already been determined that annual contributions of $1 for seven years will produce $7.89825. To produce $68,417.68, the annual contribution required will be $68,417.68 ÷ 7.89825, or $8,662.38.

Problem 4

Describe the following and state some of the respective advantages and disadvantages of each:

(a) Voucher system,
(b) Loose-leaf system,
(c) Cash journal.

Solution, problem 4

(a) The voucher system is a method of accounting for expenditures which involves two features:

1. A formal voucher detailing the items for which the expenditure was made, and usually the distribution of charges to be made in recording the expenditure. The term expenditure is here employed in its broader meaning of an immediate payment or agreement to make payment. The voucher also carries the signatures of the parties clothed with authority to authorize disbursements.

2. A voucher record provided with distributive debit columns for recording the charges arising from the expenditure, and an account payable column for recording the liability on unpaid vouchers. As the open items on the voucher record show the existing liabilities, this record serves in the place of a subsidiary accounts payable ledger.

The chief advantages of the system are authorization of all disbursements, recording of all expenditures in one book, reduction of posting by transferring column totals instead of individual items to the ledger and the elimination of the subsidiary purchase ledger.

The principal disadvantages arise from the routine of authorization which sometimes delays disbursements and from the complications which ensue when a voucher is liquidated by partial payments. Rebates applying to vouchers recorded on a page the totals of which have been posted cause some inconvenience; and habitual slowness in payment of accounts results in a large number of old open vouchers.

(b) The loose-leaf system is not a distinctive system of accounting, but is merely a binding device which permits the insertion and removal of sheets as desired. The advantages are flexibility in the organization of current records, and the withdrawal from the current books of inactive accounts. In books of original entry the device permits of many conveniences such as including under one binder all records of original entry, of various classes, for a definite period, or dividing each book of original entry into as many sections as may be desirable in order to facilitate work by distributing it among various clerks. In the ledger the grouping of accounts in a desired sequence, either alphabetically or in accordance with their nature, is made more easy than with a bound book. Inactive accounts may be withdrawn and kept in a transfer binder. All sheets containing portions of the same account may be kept together, thus avoiding the annoyance of referring to different places in the book.

The chief disadvantages are the dangers of loss of any sheets removed temporarily from a binder and of falsification of records by substitution of sheets.

(c) The cash-journal is a book of original entry in which cash and non-cash entries are recorded. On the debit side are columns for cash receipts and for the accounts most frequently debited, as well as a sundry column. The credit side is similarly organized. The use of these columns effects a reduction of posting, since, with the exception of entries in the sundry columns, all items can be posted by periodical column totals. Some inexperienced bookkeepers keeping small sets of books find the cash-journal an aid in maintaining the equality of debits and credits, since the sum of the totals of all debit columns on each debit page must equal the sum of the totals on the corresponding credit page. Novices are frequently confused, however, by finding non-cash entries in what they suppose to be a cashbook. The long explanations frequently required for journal entries cause an extravagant use of space since the number of columns usually makes the book a very wide one. Errors frequently occur by placing an amount in a wrong column, and such errors are difficult to discover. As a general rule, special non-cash columns in a cashbook invite fraud, as it is easy to put an item in a non-cash column when it should have been entered in a cash column, or vice versa; and it is much more difficult to locate such intentional or accidental misuses of columns in a cash-journal than in a cashbook where all entries carry either a debit or a credit to cash.

Problem 5

Name two methods of distributing the overhead or indirect expense of a factory so as equitably to transfer such expense to the cost of the different articles manufactured. What advantage has either method over the other?

Solution, problem 5

Probably the most commonly used method of distributing manufacturing overhead expense is the direct labor cost method. The rate per cent. of expense to direct labor is ascertained and each job is charged

with a percentage of expense determined by multiplying the labor cost of the job by the burden rate. The principal advantage of this method is its convenience and simplicity and, where all of the products of a shop are of a similar nature so that the benefits accruing to them from the functions of production included in burden cost are proportionate to labor cost, the results are equitable. But when the products differ in the service they require from large and small, expensive and inexpensive machines, from power and from skilled and unskilled labor, etc., the ratio of expenses to product bears no scientific relation to the ratio of labor.

The machine-hour plan lacks the advantage of simplicity as it requires a very careful and exact allocation of all overhead expenses to each machine. But having once ascertained a machine hour rate which includes an equitable proportion of all overhead involved in the operation of each machine, it is possible scientifically to distribute the manufacturing expense by charging it, at hourly rates, to the product benefited by the use of the machines with varying overhead operating costs.

Problem 6

Should a manufacturing concern invoice its goods sent to a branch house (1) at selling price or (2) at the prevailing wholesale price of the same or similar goods obtainable in open market or (3) at cost? State the reasons fully.

Solution, problem 6

The fact that goods have been sent to a branch does not alter their status as inventories subject to the rule of valuation at cost or market, whichever is lower. The shipment of goods to a branch is not a sale and, while there is no objection to the factory's billing the goods at selling price and putting the shipment through its memorandum or consignment accounts at selling price if it does not wish to acquaint the branch with costs, the goods should not be inventoried at selling price, as the result would be the taking up of all prospective profit in the period in which the shipment was made, leaving subsequent periods to bear the selling expenses.

If by wholesale price is meant a price which ordinarily includes a profit made by sale from manufacturer to wholesaler, this figure should not be used because of its anticipation of profit as explained above. If this is the market price which the branch is obliged to meet in competition for business, it should be used only in case it is smaller than the cost to manufacture, in which case conservatism urges the immediate provision for the loss arising from the variation in the market price. In no case should a market price be used if it exceeds the cost.

Cost is the price usually employed in valuation of inventories, but this is subject to the provision that market is not lower than cost. Some accountants maintain that if a decline in the price at which the branch could acquire similar goods on the market is not reasonably certain to cause a decrease in the branch's selling price, cost can still be used, as

it is not imperative to take up a market loss which is not likely to be realized when a sale is eventually made.

The customs of particular trades, such as the packing industry, seem to sanction valuation at market prices. This is undoubtedly because the fluctuations in the cost of raw materials cause such variations in the cost of production that it is impossible accurately to determine the cost of product on hand.

Problem 7

(a) What books of record are necessary, in addition to the books of account, for a corporation existing under the laws of your state?
(b) Of what value would such records be for the purposes of an audit?

Solution, problem 7

Because of the difference in statutory requirements it is obviously impossible to give to this question an answer of general application. The books frequently required by law are the stock-ledger, the transfer-journal and the minute-book. The varying requirements of the different states as to the detail which these books must contain cannot be discussed here. Desired information may be found in Conyngton's *Corporate Organization and Management.*

The stock-ledger should show the names and addresses of stockholders of record, the amount of stock acquired by each, with date of acquisition and name of transferror, the amount of stock disposed of, with date of disposal and name of transferee, and the balance of stock owned.

The transfer-book may be either a book of blank assignments to be filled out and signed by the owner of the stock or his agent or it may be a book with one line devoted to the record of each transfer, the transferror or agent signing on this line. The value to the auditor of these two books arises from the evidence afforded that stock is not over-issued.

The minute-book contains a transcript of the charter and by-laws of the corporation, as well as the record of the meetings of the stockholders and directors. It should never be overlooked by an auditor as it is a source of much information not otherwise easily obtainable. It evidences methods and plans of financing, authorization of bonuses and extraordinary expenditures, declaration of dividends which may be unrecorded in the books of account pending payments and a variety of contingent liabilities. As illustration of such liabilities, the following are mentioned: pending litigations, cumulative preferred dividends in arrears, contracts for future delivery of goods or for plant construction and conditional agreements for purchase or sale of securities or other assets. The minutes often disclose information which is of benefit in the valuation of assets.

Problem 8

What general principles should be observed in differentiating between capital and revenue expenditures?

Solution, problem 8

The general principle to be followed is that expenditures must not be capitalized unless they add to the fixed asset some value which it did not formerly possess and which was not already included in the valuation of the asset in the accounts. The application of this principle is by no means a simple task, as expenditures are frequently on the border line between capital and revenue, and items which in some circumstances would be classed as revenue charges are in other cases properly capitalized. For instance, during the development or construction period expenditures such as insurance may be capitalized on the theory that such costs are a necessary element of bringing the property to a proper condition for occupancy and operation.

While expenditures are generally capitalized during the construction period, a more rigid distinction prevails after operations begin. Ordinary repairs are chargeable to revenue; extraordinary repairs are chargeable to the reserve for depreciation if this reserve has been set up with sufficient credits to provide for such repairs as well as for eventual loss of the asset; replacements are capitalized, the replaced asset being charged to the reserve, unless the replacement is of so minor a nature as to be practically an ordinary repair; betterments are capitalized, at least such a portion thereof as constitutes an increase in value; and additions of new assets are clearly charged to capital.

A difficulty arises in connection with items which add no intrinsic value to the asset but are expected to increase production. An example of this would be the expense of moving machinery in a factory to improve the routing. If new machinery is added to the equipment, the installation cost is properly chargeable to the machinery account under the general rule that expenditures involved in bringing an asset to a condition for operation are capital items. But moving expenses add no value to the assets, as the accounts presumably include the original installation cost; but since the future is to benefit by the expenditure a compromise between capital and revenue is allowable, and the item may be treated as a deferred charge.

Problem 9

Give illustrations of "diminishing" or "wasting" assets. How should they be treated?

Solution, problem 9

Two general classes of wasting assets may be illustrated: those which diminish proportionately to the lapse of time, such as patents and leasehold premiums, and those which diminish proportionately to their consumption as an element of production, such as an ore body.

A patent has a definite life and date of expiration, though its effective life may be shorter than its legal life by reason of supersession or other causes. Patents are charged with the original costs and with any expenses of maintaining their effectiveness, and the account is periodically written down by amounts determined by multiplying the balance of the account

by a fraction, the numerator of which is one and the denominator is the number of periods from the beginning of the present period until the expiration of the life of the patent. If there is danger of supersession or obsolescence, the patent may be written off by larger amounts to relieve the account of the asset before legal expiration.

A leasehold premium is the commuted value of all or a portion of the rents which would otherwise have to be paid periodically. Therefore it is the present value of an annuity. The rate of commutation being established, the periodical rent which would be produced by the given present value can be ascertained. This rent is an equal periodical amount, but as each rental deduction decreases the remaining investment in the annuity the interest earned on the invested premium will decrease periodically. Hence the leasehold premium is written off by

Debits to rent of equal amounts each period,
  Credits to interest of decreasing amounts,
  Credits to leasehold premium of increasing amounts.

Ore bodies are written off by estimating the available capacity of the mine, and charging production and crediting a reserve for exhaustion of mine with such a proportion of the cost as the ore mined during the period bears to the estimated original capacity. Or the credits may be passed to the asset account; but since the reduction is an estimate it is preferable to establish a reserve.

The provision of a fund for the replacement of wasting assets is a financial matter and not a question of accounting principle. Hence replacement funds need not be discussed here.

Outside Investments

Editor, Students' Department:

Sir: Will you kindly give me your opinion on the following question: Should a corporation which has purchased securities at par plus accrued interest, show the total amount of the expenditure under the head of investments in securities, or should the accrued interest be set up as a separate item, and if so under what heading? In the event that the company later sells these securities at a premium, the transaction being a side issue from its regular line of business, should miscellaneous revenue account be credited with the amount of the premium, or is it a direct credit to profit and loss?

Yours very truly,
R. G. H.

Independence, Kansas.

Interest accrued on bonds purchased is not a part of the cost of the bonds, but is a temporary advance to be reimbursed from the current coupons when they become due. The entry, therefore, is a charge to investments at whatever is paid for the bonds themselves and to interest for the amount of the accrued interest paid. Accrued interest is a deferred account receivable and can be carried as an asset for whatever it amounts to when the books are closed.

If securities are sold for more than they cost by a corporation which does not make a business of dealing in securities, the profit should be credited direct to surplus. It is an accidental profit outside of regular operations and should not be credited to profit and loss, which should be confined to normal operations only.

Interest on Investments

Editor, Students' Department:

Sir: In regard to Liberty loan coupons, do you advise opening an account with "accrued interest on Liberty loan bonds" or a similar heading, or would it be more correct to run them into interest earned account or miscellaneous account?

I have followed the plan of crediting interest earned only with accrued interest on notes or open accounts and dividends on bonds to miscellaneous income.

Yours very truly,
N. S. K.

Medina, Ohio.

The only reason for keeping interest on Liberty loan bonds or any other securities separate from the interest received from customers on notes or open accounts is that the transactions with customers are all regular parts of the business, while interest on investments is not.

I should not mix any interest in miscellaneous income. Any interest received from bonds or dividends from stock held as investments should be credited to income from investments. Of course, if you have only one kind of investment, you can limit the name of the account to that particular security.

You speak of the dividends on bonds. Bonds pay interest and not dividends. Stocks pay dividends and not interest.

Valuation of Assets Bought with Treasury Stock

Editor, Students' Department:

Sir: The current discussion of consolidated balance-sheets in the *Students' Department* of The Journal of Accountancy has prompted the idea to submit the attached brief history of a certain corporation for any personal interest you may take in the matter.

If my request is entirely consistent, I will appreciate your views regarding the best method of determining the price paid for control in the holding company.

Very truly yours,
A. F. F.

Tulsa, Oklahoma.

Summary

Immediately after organization, a corporation takes over certain highly speculative properties, issuing therefor its entire capital stock. Subsequently three-fourths of the stock issue was returned to treasury for the purpose of providing working capital.

Much of this was underwritten at a very low figure and none sold at par.

At the end of the first year, the books showed fair profits from operation but dividends in excess of earnings had been distributed to stockholders.

Early in the second year the properties had been developed sufficiently to indicate wonderful probabilities and the prospect was used commercially to such extent that market trading was active at figures greatly in excess of par. At this time, the corporation trades its balance of treasury stock holdings for control in a holding company whose balance-sheet indicated a book value of less than par.

When you acquire any asset by trade or barter of some asset that you give for it, the price of the asset acquired must be the value of the asset relinquished.

Therefore, when the corporation traded its treasury stock for control in a holding company, the cost of the latter was the amount for which the corporation could have sold its treasury stock.

This holds good for any payment made with treasury stock. If the president of a mining company in process of development agrees to accept 1,000 shares of treasury stock for his salary each month when that stock is selling at 15 cents a share, the proper charge to expense is $150.00. That is all the president gets, and that is all that the company really parts with in available value.

I do not know why you say a "holding company." The first corporation, A, could not own control of a company B, that also would own control of A. If B is the holding company of a third company C, the fact that it is a holding company does not affect the question.

T. W. Betak & Co. announce the formation of a partnership composed of T. W. Betak, F. B. Andrews and C. A. Joachim, under the firm name of Betak & Andrews, with offices at 7 South Dearborn street, Chicago.

Louis W. Wilson announces the formation of a partnership consisting of Louis W. Wilson and K. W. Heye under the firm name of L. W. Wilson & Co., with offices at 419 Chamber of Commerce building, Rochester, New York.

Hugh Dysart announces the removal of his office to the Fiske building, 89 State street, Boston.

Haskins & Sells announce the opening of an office in Boston on September 1, 1918, in the India building, 84 State street, and the appointment of Ralph K. Hyde as manager.

Jas. Jasper Smith announces that his son, Harlan Gregory Smith, has become associated with him in practice, under the firm name of J. J. & H. G. Smith.

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Accounting for Cantonment Construction*

By William H. West.

In the early days of the war, before the advent of high income taxes, when we were all enthusiastic and ready to prove our patriotism, many of us, on receiving the now historic inquiry of our president, W. Sanders Davies, as to what we would do to help, volunteered our services for war work on any basis the government should decide to adopt when enlisting our aid.

It was somewhat of a shock to some of us to have a promise, so lightly and enthusiastically given, accepted at its face value, and when, towards the latter part of May, we received the call to report at once at Washington, there was quite a good deal of scrambling on the part of the several "draftees" to get their home affairs in order before leaving for the "front".

We all, those of us who responded, remember with pleasure (now that the soreness has worn off) the long days and hot nights of that last week in May as we organized, devised plans, outlined procedure and generally arranged, so it would seem at this distance, to run the war. The weighty discussions carried on through successive sessions on the "emergency contract" and "Panama schedule" threatened for a time to sink the ship *Enthusiasm,* but she was a staunch craft and weathered the gale, though her timbers were somewhat strained.

By the first of June the general plan of procedure had been tentatively agreed upon, and the various members of the newly-created organization of division auditors set out for their homes

* A paper read at the annual meeting of the American Institute of Accountants, September 18, 1918. Published by permission of the construction division, quartermaster's corps, United States army.

and each in his own territory proceeded in earnest to enlist the coöperation of his business associates and clientele, and through their coöperation and his own personal efforts to organize his forces for the work which was presently to be begun.

In this brief sketch I shall not attempt to outline the scheme of accounting adopted. Generally speaking this was outlined in the manual prepared at the outset of the work. In practice each auditor developed the system more or less according to his particular needs and ideas, and later, through an exchange of forms and suggestions, the present *Manual for Field Auditors* now used by the construction division was evolved, thus standardizing operation of the construction work.

Shortly after our arrival in Washington we were attached to the cantonment division of the quartermaster's corps, a division formed for the express purpose of constructing the cantonments for the new national army. The officer at the head of the division was Colonel, now Brigadier-General, Isaac W. Littell, and his chief assistants were Major Walter A. Dempsey, disbursing officer, with whom, from the nature of our duties, we were more closely associated, and, in charge of construction operations, Captain R. C. Marshall, now a brigadier-general and head of the recently organized construction division of the quartermaster's corps.

When we first reached Washington we found no one who could definitely say how many camps there were to be constructed, where they were to be situated, and when they were to be begun. It was at first reported that there were to be thirty-two cantonments or national army camps; and not until some time later was it finally decided to build only sixteen.

In organizing the original body of twelve men it was contemplated that each should supervise the accounting operations at either two or three camps, depending naturally upon their accessibility of location; and when the government's decision that only sixteen cantonments were to be commenced was announced it was felt that even with the reduced number of construction operations the supervision of the accounting would still be of such magnitude that the size of our committee should be maintained.

One of the twelve, as arranged, took up his station in Washington to act as a medium of communication between those mem-

bers operating in the field and the department in Washington. To the writer was allotted the Washington sinecure.

The selection of sites seemingly involved political activities of an acute type. One day rumor would have it that a certain city had been successful over its near-by rival in securing the plum these cantonments were regarded as being. The next day official announcement would show that the early guessers had guessed wrong. Day followed day, and the month of June had passed before all the sites had been officially designated. In the meantime some of the more enthusiastic division auditors were wiring to know when their assignments were to be given them. All too soon the eager ones were satisfied and probably more than that upon receiving their assignments, for these jobs, when once commenced, progressed with a rush and swing that threatened to overwhelm the accountants and all others participating in the project.

Be it said, however, to the lasting credit of every man that no one failed. Every man rose to the occasion and with hastily gathered, but efficiently organized, forces carried through to a successful conclusion the accounting portion of a project, which, up to that time was probably the largest single construction enterprise, considering the time allowed, ever undertaken by any government.

This does not mean that no difficulties were encountered; that no problems had to be solved; that there were no trials or heartburnings—far from it. These, due to the idiosyncrasies of the human, were all present, and at times seemed seriously to involve the success of the work. Many of the difficulties were largely the result of enthusiasm, for there was not only enthusiasm in the accounting division, but it was just as prevalent in the military, the engineering and the construction forces; so that sometimes when an irresistible force encountered an immovable body, sparks flew for a time, but nobody was burned. The camps were built on time; and the accountants may well be proud of their share, so ungrudgingly performed, in this great national accomplishment.

It has already been said that the final decision of the government was that only sixteen cantonments should be built. When these had all been selected and the work but nicely started, it was announced that sixteen additional camps were to be constructed

for the accommodation of the national guard, and the American Institute of Accountants was told that it was expected to furnish the accounting organizations for this additional work. When this information was officially received, construction work had already been started at several of the sites, and the institute's committee, in coöperation with the original committee of division auditors was much put about to find the additional force to handle the increased burden occasioned by this new work. The wires were kept hot for several days between Washington and all corners of the continent; and many of the division auditors, already burdened with their original assignments, willingly agreed to accept the added responsibility of the guard camps. The original body of division auditors was increased in size so that by this time it numbered eighteen.

Not a little difficulty arose in the newer camps from the fact that the quartermasters assigned to the charge of construction began their duties with the understanding that they were to organize their own accounting forces, and had proceeded along these lines. This difficulty was soon set straight; and by the middle of August thirty-four camps, including two embarkation camps, were under construction, and accounting forces aggregating 4,000 men were at work under the direction of the division auditors, performing the duties necessary to record this tremendous activity.

It should here be stated that this force not only had the responsibility of performing the customary accounting functions, but was also charged with the duty of receiving and inspecting all construction materials, and of recording and checking in the field the time of all labor employed. When it is considered that at the peak of operations there were not less than 250,000 workmen engaged; and when I also tell you that not less than 150,000 carloads of materials were inspected and checked, you will realize something of the magnitude of the task which was accomplished under the direction and supervision of that small body of your fellow members. It was indeed a patriotic service in the rendering of which every man gave to the job and his government in full measure all that was in him. To some this involved no particular sacrifice, as their home organizations took care of their businesses. To others there was not only the heavy physical and

mental burden, which all had to bear, but the task also involved the neglect of their personal affairs and the consequent financial loss, even though cheerfully accepted.

As an indication of the wide representation which the institute had in the prosecution of this part of this great work I append hereto a list of the cantonments and camps, and opposite each is set the name of the division auditor responsible for the accounting. It should also be stated that the auditors here mentioned were not the only members of the institute who participated in this work. Many of our members came to the assistance of their friends in the profession by joining the staffs of one or other of the division auditors and entered into the work with a fine spirit of coöperation. I regret that I have not a list of the names of these other members, for they are equally deserving of commendation.

This whole project, involving an expenditure of upwards of $200,000,000., was accomplished in less than six months; and when one considers that in the construction of the Panama canal, which, previous to this, was the greatest engineering project undertaken by the United States government, the maximum annual expenditure was $50,000,000., the magnitude of the achievement here described will be more readily grasped.

From the foregoing you might gather that I am claiming for the accountants all the credit for the accomplishment of this great work. It is not necessary to argue that the accountants performed notable service, but the engineering forces, particularly those of the army, are just as deserving of credit. They worked with fine enthusiasm, with unflagging zeal and with all their strength. Many of these men were men of high standing in civil life in their own professions. They, too, laid aside all private professional demands in answering the call of their country to this work. It was only by such a combination of patriotic endeavor that this undertaking could have been so well accomplished. I am sure that I express the feelings of my fellow participants when I say that we are glad to have been given this opportunity of serving, and we feel that in this we have been privileged beyond our other fellow members of the institute, every one of whom I am sure would just as willingly have responded to the call had he been able.

CANTONMENT DIVISION—QUARTERMASTER'S CORPS.

Division Auditors

NAME	ADDRESS	CAMP
David E. Boyce,	New York	Upton, L. I.
		Dix, N. J.
W. P. Hilton,	Norfolk, Va.	Meade, Md.
		Lee, Va.
		Stuart, Va.
Robert Douglas,	Boston, Mass.	Devens, Mass.
Charles Neville,	Savannah, Ga.	Jackson, S. C.
		Greene, N. C.
		Wadsworth, S. C.
		Sevier, S. C.
		Hancock, Ga.
Walter Mucklow,	Jacksonville, Fla.	Gordon, Ga.
		McClellan, Ala.
		Wheeler, Ga.
		J. E. Johnston, Fla.
Page Lawrence,	Denver, Colorado	Sherman, Ohio
		Taylor, Ky.
J. Porter Joplin,	Chicago, Ill.	Custer, Mich.
		Grant, Ill.
A. G. Moss,	Dallas, Texas	Pike, Ark.
		Beauregard, La.
Herbert M. Temple,	St. Paul, Minn.	Funston, Kans.
Chas. E. Wermuth,	New Orleans, La.	Travis, Texas
		Shelby, Miss.
		Logan, Texas
William Whitfield,	Portland, Oregon	Lewis, Wash.
C. G. Trost,	Montgomery, Ala.	Sheridan, Ala.
Marion Douglas,	Galveston, Texas	McArthur, Texas
W. P. Musaus,	Los Angeles, Cal.	Cody, N. M.
		Kearney, Calif.
E. J. Archinard,	Fort Worth, Texas	Bowie, Texas
Alfred Rose	New York	Merritt, N. J.
H. V. Robertson,	Amarillo, Texas	Doniphan, Texas
William H. West,	New York	At Washington office

Returns of Affiliated Corporations for Excess Profits and War Profits Taxes

By William B. Gower

When the revenue bill of 1917 first introduced into our fiscal system a scheme of taxation of corporations of which the fundamental principle was the relation between net income and invested capital, the framers of the measure passed over in silence the important and difficult questions concerning income and capital of a group of operating subsidiary corporations controlled by a holding corporation through ownership of practically all the stocks, bonds, etc., of the subsidiary companies.

It is not the purpose of this article to thresh over the ground ably covered by many of our text-books in dealing with the complex accounting questions raised by the modern idea of the control by one corporation of the whole or a majority of the stocks, etc., of a number of others. It is sufficient for the present purpose to bear in mind the essential condition which lies at the root of all these questions.

That condition is the ability of a central authority to control the financial relationships of each member in the constituent group with each other member; the ability to initiate a limitless number of inter-company transactions, some genuine, some artificial; and the ability to use this artificial material so that each member of the group may construct for itself an imposing income account and an impressive balance-sheet.

Subsidiary operating companies usually represent departments or branches or divisions of a composite industry, which from public or other necessity, or from operating or financial convenience have been organized under separate corporate form.

But there are essential differences when operating departments, branches and divisions are no longer cohesive and unseparated parts of an integral business, but each is organized in distinct, independent corporate form. The distinctive functions of the subsidiary operating companies which are denied to the corresponding department of an integral business are these:

(a) To conduct business with the public on its own account, including purchase and sale of commodities, property, etc., incurring debts and other forms of obligation, borrowing money and entering upon financial arrangements generally.

(b) To enter into transactions of a similar kind to those described above with the remaining organized operating corporate departments of the group; or to enter into transactions of any other kind with them, so long as they are not *ultra vires*.

(c) To enter into financial arrangements with the sole owner (the holding company) such as obtaining capital from it in exchange for the capital stock, bonds, promissory notes or claims on open account of the subsidiary operating company; or paying over to the holding company sums of money in refund of capital advances, and for interest thereon; or paying over to the holding company surplus cash which the subsidiary operating company may designate as dividends or as loans and advances to its sole owner.

Contrasting in this way the distinctive functions of the subsidiary operating companies with those of the corresponding department of an unseparated business, we see at once that one of them (a) may be eliminated as immaterial; for the power to conduct business with the general public, whether lodged solely with the unseparated integral business, or whether devolved upon a number of subsidiary operating companies, is an internal matter of no consequence whatever to the outside world.

When we examine, however, the remaining distinctive functions set out above, we find the subsidiary operating companies involved in a maze of transactions, genuine or artificial, the majority of which would be disregarded by the departments and branches of an unseparated integral business in its general books of account, but which, in the case of the subsidiary operating companies, must be recorded in their accounts owing to the exigencies of their corporate organization. These inter-company transactions may be described broadly as:

The transfer of commodities and properties, at a price;

The transfer of sums of money;

The transfer of expense and interest charges, at a price.

So that we have here a limitless number of inter-company transactions, which in the case of a normal integral company do not enter into the general books of account, but which, in the case of subsidiary operating companies, controlled by a holding company, must necessarily be recorded in the accounts. Not only that; but where the transactions are the transfer of commodities, properties, expense charges, interest charges, etc., the values to be applied in the record need not rest upon fixed consistent principles, but may be decided by the caprice of the controlling sole owner, the holding company.

The ability of a central authority to deal at will with the property of each subsidiary operating company owned by a holding company; to initiate an endless number of inter-company transfers of commodities, properties, expense and interest charges; to regulate the values at which these transfers are to be recorded in the accounts of the subsidiary operating companies; to shift money and capital from one to another at pleasure—all these imply the ability to arrange the financial structure of each corporate unit so as to produce any desired result in the formation of a balance-sheet and any desired result in the appearance of a statement of net income of each unit.

The artificial and illusory nature of the separate balance-sheets and income accounts of the respective corporate units was perceived by accountants long ago. The remedy was quickly found by them in the evolution of the consolidated balance-sheet and the consolidated income account. By means of these consolidated statements the accountants swept away the entire fabric of illusions produced by inter-company transactions. The true position of the constituent companies to the outside public appeared in the consolidated balance-sheet. The true result of business conducted with the outside public was reflected in the consolidated income statement.

These conditions were recognized fully by the excess profits advisers after the passage of the revenue bill of 1917 and the treasury department directed affiliated corporations to make consolidated returns for the purpose of the excess profits tax (T. D. 2662, March 6, 1918). The affiliated corporations included in the order were those "among which there exist contracts or trade or financial practices which arbitrarily or artificially in-

fluence or determine the amount of the invested capital or net income of one or more of the corporations so affiliated, and where 95 per cent or more of the stock of the subsidiary affiliated corporations is owned by a parent or controlling corporation or by an individual or partnership." This definition was sufficiently inclusive to embrace all subsidiary operating companies owned by a holding company.

It comes as a surprise, therefore, that the revenue bill of 1918 as passed recently by the house of representatives, provides in section 336, title III, that in no case shall the war profits taxes or excess profits taxes be determined on the basis of a so-called consolidated return, but shall in each case be determined upon the basis of the net income and invested capital of the corporation liable to the tax.

Apparently the framers of the house revenue bill of 1918 are convinced that the treasury department has at its command the ample leisure for investigation of the methods employed by affiliated corporations in distributing their net income and invested capital, and also has in its service sufficient specialized accounting ability to prevent, expose and correct any abuses. This may be so, but the first step by the investigators will be the preparation of those consolidated statements of net income and invested capital of the constituent companies which appear to be so obnoxious to the framers of the house measure; and the subsequent conclusions and decisions of the treasury experts will be determined, largely, if not entirely, by the inferences to be drawn from such consolidated statements.

Quite apart, however, from the abuses arising from the artificial distribution of net income and invested capital among the constituent companies, it is unjust to require separate returns from each corporate unit, for two reasons in particular:

Separate tax returns are unjust because the effective invested capital of the integral enterprise although dispersed among the affiliated companies is the instrument of net income to all.

It frequently happens that an enterprise, from the necessity of rounding out its business, making it internally sound, complete and self-supporting, and increasing the profits of all its members, is obliged to invest a large capital in another department or branch, the operation of which produces a relatively small net income on the capital invested, or none at all. Such

capital was invested chiefly for the purpose of increasing, protecting or insuring the return on the invested capital of the entire enterprise, and only incidentally for the return on this specific capital which the new department is able to show in its separate operations.

The effect of separate tax returns for each department or branch of a composite industry which happens to be organized as a corporation is to disperse illogically and unfairly the effective invested capital of the enterprise among the component parts, some of which exhibit relatively low capital and high profits, others relatively high capital and small profits, or no profits at all. A heavy and unjust burden of taxation falls, consequently, on the corporate department which has low capital and high profits—unjust, because in the tax calculation it is deprived of the true invested capital utilized in producing, safeguarding and insuring its net income. It is incorrectly regarded, in the tax calculation, as a separate, distinct, self-supporting and independent entity, whereas, it is only part of a composite organization, all the other members of which necessarily contributed to produce the general result.

The invested capital of each corporate department of an organization of this kind is an instrument used not only to produce the net income of that particular branch, but to assist, directly or indirectly in the production of the net income of the remaining members of the operating group. It is incorrect to regard each member as independent of the group, or the stated net income of each member as similarly independent. They are not only inter-related, but their operations are merged.

Separate tax returns are unjust because they would operate frequently to deprive affiliated companies of a large part of their effective invested capital.

It frequently happens that a holding company lends large sums out of its invested capital to affiliated companies on bonds, promissory notes or on open account, the money being invested in the properties of the affiliated companies. In the hands of the affiliated companies, these sums are borrowed capital and may not be included in invested capital in the tax calculation. They retain the status of invested capital to the holding company.

In reality so much invested capital has been transferred by the holding company to its subsidiaries. Nevertheless, for pur-

poses of the excess profits tax calculation, on the basis of separate returns for each corporation, the holding company retains these capital advances as part of its invested capital, and the subsidiary companies cannot include them.

This is unjust:

First, because the subsidiary operating companies furnish the bulk of the net income; the subsidiary companies employ the bulk of the invested capital as the instrument in obtaining the net income; and the subsidiary companies, and not the holding company, should be entitled to include in their invested capital the true amount employed.

Second, the bulk of the net income of the holding company is usually derived from dividends of the subsidiary companies, which dividends, in the hands of the holding company are not subject to excess profit taxes. If now the holding company be required to make a separate return of its net income and invested capital, a situation arises in which a large amount of invested capital, actually employed by the subsidiary companies, is compulsorily and immovably fixed in the return of the holding company as part of its invested capital, while, on the other hand, the net income derived through the instrumentality of this invested capital is excluded from the return of the holding company, (dividends received by the holding company from its subsidiary companies not being subject to excess profits taxes) and appears in the return of the subsidiary companies.

* * * * *

If the framers of the house revenue bill of 1918 believe that separate returns from each constituent company in a group owned by a holding company will increase the revenue to be derived under the tax measure, they will be disappointed; for affiliated companies finding themselves confronted with onerous taxes as a result of separate returns, as compared with a consolidated return, will invoke section 327 of the revenue bill, which provides relief for cases in which "the invested capital is materially disproportionate to the net income as compared with representative corporations engaged in a like or similar trade or business.'"

In the end, the only result will be to burden the treasury department with investigation and discussion of complicated details, and perhaps to delay the assessment and collection of taxes.

Bonus Plan For Salaried Employees

By J. Pryse Goodwin

It is of course recognized that the purchasing power of the dollar is today considerably reduced and that the increased cost of food and clothing affects every one.

Increased earnings due to the war, it is equally recognized, are going to wage-earners rather than salaried employees, while it is the latter class which suffers most from increased prices, for the reason that they have to keep up what are known as "appearances."

Again, when men are taken in the draft, their duties are distributed among their fellow mechanics at increased rates with extra pay for overtime; while the duties are usually absorbed without additional compensation by salaried employees, all of whom are working harder—working to help their employer who is short-handed; working to help Uncle Sam by releasing men to fight, and working for that great satisfaction that comes to the individual from the realization of "doing one's bit."

Hardships and inequalities of this nature, due to the war, have brought employer and employee to the assistance of one another for their mutual benefit and conservation. Never before have employees so realized that their livelihood is dependent on the success of their employer, and never before have employers so realized that their continuation in business is dependent on the fidelity and co-operation of their employees. As a result of this appreciation of dependence one upon the other, there is apparent on every hand a bond of friendship and mutual sympathy that is fast replacing the enmity that used to exist between capital and labor.

The moral obligation on the part of the employer to share these added burdens of his employees is of course dependent on whether or not he be an equal sufferer through the war. It is therefore necessary for his protection that any bonus plan be based upon profits and that the life of the bonus be dependent on the continuance of the profits.

Increased business indicated by gross sales is unsatisfactory as the basis of a bonus plan for the general reason that the

majority of salaried employees have only an indirect influence on gross sales, and for the particular reason that gross sales do not necessarily mean gross profits, especially in a period of advanced prices, when quite frequently the advance in the cost exceeds the advance in the selling price.

A bonus plan based upon net profits has the advantage of affording all employees of all departments an opportunity of sharing in the results of their own efforts and gives then a new, a different interest in the business. Their viewpoint is changed from that of an employee to that of a part proprietor and as quasi-partners it becomes immediately to their interest not only to help their employer but also to help one another not only to sell more goods but also to curtail expenses. Department jealousies give place to department rivalry, and as all employees participate in the net profits of all departments, they have the desire to help employees of departments other than their own.

This healthy atmosphere not only affects heads of departments but permeates the mentality of the rank and file, stimulating them to do more and better all day and every day, whereas the supervision and stimulus of the managers is intermittent and the force of their efforts is directed from without rather than from within.

Under a bonus system based on net profits, office boys become interested in conserving supplies; telephone operators take pride in reducing charges for employees' personal calls; stenographers pay closer attention to busy executives, enabling them to accomplish more in limited hours; shipping clerks avoid mistakes, so costly in express charges and delayed collection of accounts; executives see that department managers, whose inefficiency affects their bonus, mend their ways or are exposed; and all employees become caretakers and watchmen of time and material so essential in this period of conservation.

From the above it is apparent that a bonus plan should be regarded by the employers as an investment rather than as an expense, increasing profits rather than reducing them, and at the same time adding to the contentment of the employees and the security and stability of the business generally.

Now comes the question of how best to apply to any particular business a bonus plan based on net profits. From his experience, the writer recommends the following principles as essential:

(1) That all salaried employees, both inside and out, participate, except employees whose salaries are already augmented by commissions.
(2) That the bonus be distributed monthly by way of a percentage based on salaries of the preceding month.
(3) That the amount to be distributed by way of bonus be ascertained by a percentage (which shall be kept confidential) of the net profits of the third preceding month.

Referring to these essential principles in order:

(1) All salaried employees should participate for the reason that the increased cost of living is felt by every one according to his obligations, and the increased duties caused by a reduction in the force should through good administration be borne by the entire remaining staff. In reciprocity the employer must of necessity express his sympathy and appreciation to every one. Salesmen on commission should be eliminated because, speaking generally, they receive the benefit of commissions on gross sales inflated by increased prices, and any reduction in their force usually results in increased business for the remaining members of the staff.

(2) By making the bonus distribution monthly its influence as a stimulant to efficiency will be kept alive in the mind of the dullest employee. By making the distribution by way of a common percentage on salaries, jealousies which tend to nullify the effect of the bonus are eliminated. Salary rather than bonus should determine the relative value of the services of each employee, and a common percentage stimulates effort for a common cause.

(3) Bonuses based on profits become payable only when those profits are converted into cash. Three months should be ample time for the conversion. Bonuses usually result in increased profits, and employees who have helped earn those profits will, in the face of alluring offers, be induced to remain with the corporation in order to participate in the results of their own efforts.

Concerning Criticism

A WORD TO THE YOUNGER PUBLIC ACCOUNTANT

By Waldron H. Rand

How disliked a man the critic is. "What is your occupation?" asked one man of another. "I am a critic," was the reply. "What?" said the questioner, "A critic? And do you get paid for it?" "Certainly," was the response. "My! My! Paid for being a critic!"

There evidently was a difference in their views of what constituted a critic. I am referring to the critic who censures or finds fault. You all know him. Nothing you have and possess, nothing you like and admire, nothing you have any decided favorable opinion about escapes his unfavorable comment. It becomes a habit with him. You get no support from him; you expect none. You hate to meet him. Some one has said: "It seems to be man's province to make nature more efficient, and this is exemplified in the motor boat, the automobile, and the aeroplane; but what about the critic who finds fault with a man's legs in creation, when wheels would have been so much more efficient!"

The public accountant might be considered a finder of faults, but don't be a fault-finder. It is unnecessary.

Don't misunderstand me. There is a time for criticism. There is a time for almost everything. The thing we are to avoid is the uncalled-for criticism of existing methods—"uncalled-for" mind you. If called for the situation becomes changed.

If you are requested by the management or the proper person to criticise methods, and you are able to do so, by all means give the benefit of your knowledge and experience, and do it modestly and quietly, and be sure to give the reasons, and let any change which you may recommend find first an advocate in the person or persons most interested before attempting to put it on a working basis.

Suppose you recommend a change in the method of paying off the men in a factory. Let your first endeavor be thoroughly to convert the management, the payroll clerks, the foremen and the men, too, to a realizing sense of the advantages to be derived

from the proposed change. Then, when introduced and properly watched for a while, everybody will be pleased to see how smoothly it will run.

What I object to is an attitude which finds uninvited expression in ways like this:—

A bookkeeper will be told his bound ledger is too old style: or that he never should journalize his cash; or that his three column cashbook or purchase journal is very objectionable; or that his filing system is about the worst ever seen; or that his pencil sharpener is good for nothing and his desks too high; his room too dark, his hours of work too long and his salary too small. Every one of such criticisms is generally unnecessary and makes only trouble and annoyance.

Perhaps the remarks about salary and hours of work might for the moment flatter the bookkeeper, but sooner or later even such comment will react against the unwise accountant. If the accountant cannot find anything to praise he must be a confirmed dyspeptic or else too one-sided for his calling.

There are certain stated principles of accounting which form a basis for all systems of accounts. Seldom, however, in practice, do we find two sets of accounts kept in exactly the same manner. Even though started alike, little changes will creep in—changes due to the difference of this particular business from all others, or the differences of this particular bookkeeper or particular proprietor from all others. So when you approach the books for an audit, consider the fundamentals and do not refer to the variations noted, especially the first time you see them. If your attention be invited to the changes made in the system as stated, and even though you note that they are wrong in principle, you may say that you will discuss them later and have them explained, and that you are always ready to be instructed and for the purposes of this business some change might be desirable.

All the while try to put yourself in the other man's place and try to find out what his thoughts are—try to understand him. These innocent looking changes may be made to cover a multitude of sins. They may be simply a wrong way of doing the right thing. Be non-committal until you know.

I remember starting an audit where the bookkeeper informed me he had effected an improvement in his method of journalizing certain distributions of labor and material from sundry depart-

ments. He formerly had been accustomed to copy into his bound cross entry journal a lot of tabulations as a basis for the entry and we had recommended that he leave out the tabulations. This he did not want to do, and so in following our recommendations, unknown to us, he proceeded to use a subsidiary journal for this class of entries and to post direct therefrom. When next audited, errors were discovered resulting from this practice which, when his attention was drawn, enabled us to convince him without trouble that the counsel we had to give was the wise one to follow; and his "improvements" were discontinued. Again, the changes in the methods from your ideal plan may not be wrong in themselves, but may excite your opposition simply because they differ from your personal choice. Criticism which may occur to you to make may rest upon your lack of understanding of conditions.

It is not a difficult feat to distinguish between knowledge and understanding. We know the plant grows and the blossom expands, but we don't understand it. We know our feet and hands respond to our will power, but we cannot explain why. A woman's magazine has the following: "Willie," said the teacher, "how much is six and four?" "Eleven," said Willie promptly. "No. Try again." "Twelve." "No." "Thirteen." "No, no, you're guessing now. But why couldn't you have guessed ten?" "Because it doesn't make ten," said Willie, confidently. "Five and five make ten. I remember that." It is dangerous to assume you understand the reasons for accounting methods from the records presented. It is much safer, even necessary in most cases, to learn the whole story, and listen to a full explanation, before reaching your conclusion and giving expression to the invited criticism.

A retail merchant's practice was to prepare a neat copy of the bill for each delivery, and the accountant, who thought he saw a chance of criticising this practice on the score of economy, felt humiliated when he found the plan was for the driver to receipt the bill and collect the money. The merchant was doing a cash business and it was an important part of his business system to supply a neatly made bill with every delivery to every customer. The accountant should have waited until he understood all the conditions. How often do we hear the question: "Do you prefer

loose-leaf records or bound books?" Conditions alter cases. Do not pass judgment from a superficial examination. Study to understand all the conditions precedent.

We frequently have to advise young men who are not so situated as to be able to attend school in person, but want to take a correspondence course, and we try to impress the foregoing truth upon them by suggesting that they confer with some public accountant near at hand and induce him to help them in their work, otherwise they will be prone to get filled with a lot of knowledge they do not understand.

The variations in the terminology of accountancy are awful and amazing. The American Association of Public Accountants had a standing committee at work on terminology for what appeared to be a long while, and I believe it never got beyond the letter "A" in its publication. How common it is to include proprietorship accounts among so-called liabilities in a balance-sheet. Ask a number of merchants to define turnover and you will get a variety of answers. Cost of goods sold is the turnover.

I remember well when I first saw a British balance-sheet with its liabilities on the left hand and its assets on the right, and how it bothered me until I learned the reason for it and understood. You know the British system is founded upon the theory that the balance-sheet represents the business account with the proprietor, while the American system is based upon the claim that the balance-sheet is not a journal entry with the proprietor, but a statement of balances from the ledger.

Working Capital for Rate-Making Purposes

OLAF A. MANN.

The usual balance-sheets of utilities will show capital invested in four groups; (1) service producing facilities, (2) investments, (3) working assets and (4) deferred debit items.

If an inquiry is made as to the amount of working capital required in connection with the utilities' operations, the sum of the working assets and deferred debit items applicable to operating requirements, averaged over a sufficient period to allow of a sound determination, will provide the answer.

However, if the problem is to determine how much working capital has been provided by the investors, the gross amount of working capital will be reduced by the amount of working liabilities, on the theory that an amount of working capital equal to the sum of working liabilities has been provided by others.

We therefore have two bases for determining working capital: (1) on the total amount employed in the business; (2) on the total amount of the investors' working capital employed in the business. No general definition of working capital can be complete unless it specifies both these propositions.

In presenting an application for increased rate, utilities should show the total amount of working capital necessary to conduct their business, using an average based on two or three years. The items to be included are cash used in current operation and in routine construction, petty cash funds, bills and accounts receivable (less the element of profit), prepayments and material and supplies. Any bank interest or bills receivable interest should be capitalized at the desired rate of return and deducted from the total working capital.

In the determination of a fair return on the property of a utility the regulative commissions are interested in ascertaining two facts; first, the value of the investment at the date on which the value is to be determined; second, the return earned at that date and applicable against the investment. Broadly speaking, investment includes three elements, (a) plant and property (b) working capital and (c) an amount due the investors

by reason of previous deficits. The total of these three gives the valuation upon which the revised rates should be based. The earnings to be applied against this valuation are the net operating earnings, which are the gross operating revenues less the operating expenses applying against said revenues.

Losses in the value of service producing facilities by reason of depreciation or any other similar factor are a deduction from the total plant and property values. Any depreciation reserve over and above the proper accumulation of depreciation funds should also be deducted. This is on the theory that the public is entitled to the return on the unexpended funds created by charges for service.

Exclusive of depreciation reserve funds the commissions are not interested in the sources from which the capital is procured to purchase the property and other elements represented in the valuation. Their sole function is to agree as to a valuation and on a return on that valuation. As a matter of fact money or its equivalent might have been procured from any of the following sources:

(1) Capital stock
(2) Funded debt
(3) Bills payable
(4) Accounts payable
(5) Donations

The return that has been decided by the commission as adequate will be reduced by the amount of interest that the stockholders have to pay on any interest-bearing indebtedness that they may have incurred. The matter of financing, however, is in the hands of the stockholders, and the less the interest obligations, the more net return stockholders will receive. Therefore it is my opinion that in computing working capital for purpose of rate-fixing the amount of working capital contributed by others should not be considered as a deduction unless the same amount of stress is laid upon the money advanced by others for purposes of construction. It would be reasonable for a utility to make application to the commissions for working capital containing the following elements:

Cash needed in the operations of the business less interest capitalized,

Operating bills receivable less interest capitalized,

Operating accounts receivable less element of profit,
Operating prepayments,
Material and supplies.

Summing up, the theory simplifies itself into this definition: working capital is the amount of money or money equivalent found to be necessary to conduct the current operations of the utility.

An Important But Under-Estimated Asset

By John R. Ruckstell, C.P.A.

The readers of this magazine are so accustomed to articles that include a presentation of figures or actual accounting problems that I hesitate to present a subject which, while I consider it of indispensable importance in leading to success in the accounting profession, is perhaps of no less importance in any other profession or business.

Believing, then, that I shall give readers of The Journal of Accountancy, and more particularly those who have recently "launched out," some suggestive hints that can be turned to valuable account in the development of their professional career, I shall proceed to outline what may be worth reading and then well worth further active consideration—*personality* as a factor in professional and business success.

Personality so generally lies at the foundation of success or failure as an active factor that about the only exception to the rule is when its effect is so indifferent or negative that mere existence is the net product of individual effort. The experience or observation of every active man of affairs will furnish instances, not few in number, where a first impression—favorable or unfavorable—made at a first interview or meeting was noticeably or decidedly in the interviewer's favor or to his disadvantage. Preparation for a successful professional career consists not alone in necessary technical knowledge and mechanical or manual training. Next to these in importance or of necessity follows the factor of proper personality. Perhaps I should even start with personality and follow with mental training and material equipment; for with pleasing personality and winning manner to lead, the other attainments more easily follow to impress themselves, and even their lack or shortcomings are partly offset.

I shall therefore draw attention to personal qualities which, added to a business or professional education, make friends, attract clients, win entree into business and lead to success in professional or business life; and again to personal qualities, all

too common, that have a reverse effect. Lying between these two extremes are the further and more numerous individual qualities in manner, habits and address of the large army of human beings that have an indifferent effect either to attract or to repel.

Not only is a pleasing personality one of the most valuable adjuncts to professional knowledge or business training, but it is also an acquirement that cannot well be directly taught by a teacher or secured from text-books, and must largely be acquired by observation and self-education. The sensitive student would generally treat such action as a trifling with his personal feelings if a teacher should remind him of traits of character, mannerisms, awkward poise or personal peculiarities that are to his disadvantage. Therefore the teacher, though let us believe in most instances furnishing to the student the correct living example, scarcely dares actively to teach by individual application to the individual student those things which rank as of such paramount importance in the preparation of one for professional or business life.

Strange how few of us like to be told of our shortcomings, particularly when they are personal habits or physical mannerisms, yet how grateful most of us are to be given facts, explanations or suggestions that add to or improve our stock of technical or general knowledge.

And, therefore, after all that the student can be taught from text-books, by lectures on theory or the recital of actual experience by professional accountants and business men, there is still a most important factor as an element in his future success which must very largely be acquired by himself, by a study of himself as it were, in a mental mirror, by observation of others or by the intuition of the moment in particular circumstance or environment.

What I mean then to present in this article after this somewhat lengthy introduction, is an outline or discussion of those favorable personal traits or characteristics—pleasing manner, persuasive expression and general address or physical deportment—which, added to a scientific business or professional education, lead to success; and the absence of which in an individual of the most thorough education and technical preparation will often lead to failure or result in but meager or mediocre returns for otherwise earnest or unusual effort.

Personal attractiveness is two-fold—corporeal and intellectual; the first being the impression made by such matters as quality and style of clothes and habits of dress, physical mannerisms, self-assurance in gait and bodily carriage; the second being the spoken address, the measure of conversation to present circumstance, the ability to be a tactful listener, to be complimentary without over-doing, to defer to another's real or assumed knowledge, to give the lead in conversation to the other fellow.

How often in our daily associations we meet with a person of winning manner—a person who at once disarms doubt, commands respect, can hold our attention, establishes confidence and wins our friendship. This in business is a factor of great value, and I speak particularly of that business intercourse in which we are business dealers, promoters or business seekers, rather than business employees or a part of the business machinery.

We all have many times been impressed with one person's open frankness, directness, grace of manner, modest reserve, poise and control of self, as contrasted with other observed instances of a halting embarrassment, bashfulness and apparent lack of experience in human association. I have seen men looking for a position who, while physically going forward into a business office, seemed also from bashfulness and fear to be trying to retreat, afraid of themselves in the presence of supposed superiority. As we can give offense by being too bold beyond mere frankness, so we can fail to impress by being too bashful in the other extreme.

The average man of quick perception who seems to be *alive* can use his eyes by looking out of the corners to see to the right or to the left and observe what is going on or have his attention arrested; but I have seen men who could not look to either side without turning half way around and moving both head and body together.

In so small a matter as hand-shaking, what a difference there is. There is the vice-like grip that almost breaks the bones of your hand, or the easy, almost clammy touch or contact of the extended fingers that gives you the impression that the salutation is perfunctory, a conventional formality, and that a continuation of acquaintance is a matter of indifference or not particularly desired.

It is unnecessary to try to define the many little actions that characterize an individual as pleasing, nor those others that strike

us as not particularly to our liking. All of us have many times met those with whom we have been favorably impressed by look, by act, by word—very trifling matters each of them, scarcely possible of description or definition, yet the value of the impression made was no trifle. Then we have met others who irritated us with some trifling peculiarities, so trifling in some instances that if we were asked to explain what offended or displeased us, for what reason or wherein the person was not attractive to us, we should scarcely be able to give an understandable explanation.

In commercial as in diplomatic relations, tact plays no inconsiderable part as an element of success, and its absence is often costly. Among our social acquaintances we can afford to be outspoken and show our inner feelings, dislikes and preferences much more than we can in business or professional life. It may be all right in our social relations to talk about or advise upon being frank and outspoken, or in our actions to make much of those we like and be cold and indifferent toward those whom we do not particularly fancy or wish to cultivate; but such a policy does not go in business.

Business levels all ranks, conditions, castes, religions, races and nationalities. The shrewd proprietor of a large store will salute with the same kindly, amiable smile as customers the wife of a hodcarrier and the wife of a banker.

You will say that this is not natural and that we should be natural. Let me say to you that the friendly smile and patronizing manner of the business or professional man, diplomat or politician is often very much feigned, or as we say, "put on," and decidedly not an expression of his true feelings at that moment. The shrewd, tactful business man is neutral before a stranger, avoids the discussion of religion and politics; talks rather of the weather or the tendency of the times till the other discloses his attitude and leads the conversation. The conversation once started, the shrewd business man now shows himself the interested listener and will soon make himself active and agreeable in the conversation—whatever the topic. Thus a little discretion and diplomacy at the start, even though partly insincere, often become a valuable asset in later business relations.

This subject of individual deportment involving considerations of psychology, personal mannerisms, dress and so forth cannot well be codified or reduced to a set of rules. But certain

generalities will serve to illustrate and summarize positive and negative examples that on the one hand should be followed, on the other avoided—a type to be adapted to our actions but modified to suit our individuality; or per contra, a type of action seen in others which we must observe to be a disadvantage, which as a negative example will be kept before us as unsuited to our welfare and calculated if practised to cost us loss of friends and clients.

Space and editorial courtesy permit only a few illustrations, but these will at least be suggestive, and the reader may extend them from his experience and observation.

I present the following, then, as representative:

A frank address, looking straight into the face of the person we speak to, and not appearing to be partly afraid or unable to speak, or show that we are overcome by embarrassment, looking down, aside or away from the person addressed.

A cautious entrance into a discussion; rather asking questions, seeking information and being a good listener until we have some knowledge of the prejudice of the other side than starting an argument by expressing decided opinions, which it will be too late or very difficult to modify or hold back when we have found that policy requires or demands it. The very best example we have of care in expression and caution in leading discussion is found in the diplomatic service of all civilized countries, where the best brain of the nation is trained in politeness, tact and discretion, in being non-committal, evasive or silent when circumstances warrant. It would seem to be the foremost quality of every statesman to be able under all conditions of controversy, or in his business dealings with representative men of other nations, never to lose his temper, nor by act or word prematurely to close the door of controversy.

A reasonable amount of self-assurance is commendable and even begets facility in doing our work; while on the contrary to be fearsome of failure begets discouragement. The accountant who feels certain of his ability to carry out with ease the case he undertakes will more readily accomplish his task.

Altruism—that quality which makes us interested in the welfare of others, which makes us inquire after the interests, health, cares, domestic ties, etc., of another—is a part of this personal asset as opposed to egotism, or a too frequent use of

the pronoun "I," and making ourselves the heroes of every affair of which we were a part or a party.

Familiarity can become an overworked trait if we are not careful, particularly in dealing with superiors, and a nice discriminating caution must be observed, rather to let the superior encourage the advances than to obtrude ourselves to the point, perhaps, of giving offense. This last observation applies rather to relations between employee and employer than to association between business men.

There is in business a type of individual that has been styled "a good mixer" whose ability to make friends and hold them is not to be despised and whom we may profitably observe with a view to learning some valuable lessons. Nor should we conclude that the good mixer must be an habitual or excessive drinker or smoker, for there are other ways of entertaining or being entertained than by consuming liquor or cigars. It will soon be noted, if you study him, that the "good mixer" has a very pleasing personality, is a free and good talker, seldom dogmatic, does not enforce his views with an autocratic air, and does not do all the talking. To him, every question has two sides and he is willing to admit that he may not always be right on every subject, and he may sometimes let you or me have the last word.

Personal appearance in matters of neatness, quality and style of dress play an important part in making favorable or unfavorable impressions. Carelessness in this regard is more than likely to give the impression that prosperity is lacking, that the individual is losing or has lost his grip, or is in the cheap class, and such impressions beget the secondary thought, if it is not in fact the primary one, that lack of ability may be the cause. The cheap looking man is expected to supply cheap service. The same psychology applies in such matters as a man's place of residence, or where he takes his business-hour meals. His appetite may be satisfied as well at a "beanery" as at a first-class restaurant, but the two places represent an impressionable asset of a value proportionate to the respective costs of the meals.

If from the foregoing remarks some of my present or prospective professional brethren shall receive suggestions which they can turn to profitable account, I shall feel that this departure from customary contributions appearing in these pages will have been worth at least the space alloted to this article.

Stock Brokerage Audits*

BY EDWIN S. HALTER

Audits of various kinds may be made of the accounts of a stock brokerage firm, the exact nature of the audit and the extent to which the accounts should be examined being determined when the purpose of the audit is known. Briefly speaking, the following audits may be made:

1. Balance-sheet audit,
2. Detailed audit,
3. Verification of securities and cash.

A balance-sheet audit is usually desired by a firm when a member or confidential and trusted employee, usually the office manager, has complete control of the detailed operations of the office so that a thorough examination of the income and expense accounts by the auditor is oftentimes not desired. A balance-sheet audit may also be made for credit purposes for use at banks, although such is rarely the case, as banks seldom make loans without having them secured by collateral with a ready market, and therefore seldom require a certified balance-sheet.

Another purpose for which a balance-sheet audit may be required is when the firm is being considered as banker to float an issue of securities. An audit of this nature, besides comprising the verification of the assets and liabilities, usually requires at least a cursory examination of the income and expense accounts. In this case, or whenever he is to certify as to the result of his examination, the auditor should insist on covering every feature which he deems necessary and if permission is not granted to investigate everything to his satisfaction, such as a scrutiny of the private ledger accounts, he should be careful to qualify his report or certificate accordingly.

In a detailed audit, besides verifying the assets and liabilities, a thorough examination or an exhaustive test should be made of the income and expense accounts for the period under audit. Besides, the investment and private account should be thoroughly gone into for the purpose of verifying income and interest and other items contained therein. An audit of this kind is usually required when the members of the firm are not in close touch

*A thesis presented at the May, 1918, examination of the American Institute of Accountants.

with the general work of the office. When this is the case, an earnings or profit and loss statement, besides the balance-sheet, is usually desired by the client.

An audit covering only the verification of securities and cash is often desired, because these items being the stock-in-trade of a stock brokerage firm and being extremely valuable, they are the only features in which the client is vitally interested.

Besides having audits made for the purposes described above, stock brokers derive a certain degree of satisfaction when their customers are apprised of the fact that a verification is being made of the accounts. The customers then have a feeling of added security that their brokers are using every precaution to safeguard their interests.

The audit is usually started on the last day of the month, but, whatever the date, the best time during the day is immediately after the market closes. If many inactive securities are held for customers in safe-keeping, or the firm is carrying large quantities of securities for its own account, it is possible that the audit may be started before the market closes, for such securities, being rarely disturbed, may be examined earlier in the day.

The work of balancing the securities should be started at the very outset of the audit and should be continued without loss of time until all the securities have been accounted for. This is essential, for if control is lost over them before they are balanced, the entire audit may prove to be practically valueless. This is particularly the case if there is a rapidly changing market, for substitutions and transfers of securities are then made so often that great difficulty may be experienced in re-establishing control of them, and such an amount of time would be consumed that other important features of the audit, such as the verification of the sufficiency of margins in customers' accounts, would be delayed for a considerable period.

A physical examination should be made of all securities on hand. Care should be observed to see that the stocks and registered bonds are in the name of the firm, or, in case they are in some other name, that they are endorsed in negotiable form. In the case of coupon bonds, it should be noted that the coupons maturing on the next interest date and all subsequent coupons are attached.

The active securities are usually kept separately and are

referred to by stock brokerage houses as being in the "box." As the securities are counted, such securities as are recorded in the box book should be checked, or a separate list may be made of them. The box book, or list, should be kept under the control of the auditor until the securities have been balanced or at least a proper record has been made of errors existing. No time should be lost in counting the securities in the box as they usually must be deposited in the safe deposit vaults by five o'clock in the evening. It is a great advantage if the examination be completed before that hour, for the following morning when the securities are brought back to the office time will not often permit their being examined before the opening of the market. When this happens and the regular routine of the office work is started, many of the securities are likely to be disturbed. Of course, if it is impossible to count all the securities on the day of the commencement of the audit and a complete count is not made until certain changes have occurred, such changes may be followed through the office record known as the "blotter." It is desirable that this be avoided if possible.

The securities in the box are but a small portion of those for which the broker is responsible; therefore confirmation of the others should be started as soon as possible. The greater portion of the securities will undoubtedly be at the banks where they are used as collateral on loans. Some will be in the hands of other brokers in the form of securities on loans and securities "failed to receive," while others may be at the transfer offices. Likewise, the firm may be holding securities which it has borrowed from or "failed to deliver" to other brokers.

Confirmations should be prepared in duplicate for all such securities. They should then be compared with their respective books where they are recorded and the money balances should be proved with their controlling accounts in the ledger. Every effort should be made to mail the confirmations the same night so that they will be received by the various banks and brokers the next morning. The office staff of the recipients of the confirmations will then be in a position to compare them with their records or with the actual securities before any changes are made. If the sending of confirmations is delayed, the recipients may be put to a great dea lof inconvenience in referring back a few days on their records. If this occurs they are likely not to take the

trouble of confirming them, with the result that the auditor may experience difficulty in trying to verify such securities.

When mailing confirmations, a stamped addressed envelope to the auditor's office should be enclosed.

When the confirmations have been returned to the auditor he should immediately compare them with the duplicates in order to see if any differences exist. If they do, they should be immediately investigated.

The securities are recorded in a security record. When large quantities of securities are carried, it is preferable to have separate stock and bond records. The accounts in these records comprise the different securities, and all noted therein should be accounted for. Each account will show the position of the security, one side of the account showing those "long" and the opposite side those "short." The long side represents purchases for the account of customers or for the firm, securities borrowed and "failed to deliver." The short side represents short sales by the customers or firm, securities held by banks as collateral on loans, "failed to receive," securities lent, etc.

As soon as the record is released to the auditor as being completely posted, the list of securities counted and the duplicate confirmations should be compared with it and all errors found should be carefully noted. The securities in the investment and customers' accounts should then be compared with the record. The customers' securities may be checked either direct from the statements after the latter are surrendered to the auditor by the bookkeeper, or from the collateral sheets often furnished by the margin department. If the collateral sheets are used, care must be taken to preserve such sheets so that the customers' statements may be compared with them before the statements are mailed.

When the securities from all sources have been compared with the record, the latter should be completely checked and the securities should be balanced. This is done by footing the long and short sides, the totals being in agreement. If they do not agree it is evident that some posting has been omitted or entries have been made which do not belong there. Such errors in footing should be noted with other items in the accounts which are not checked out. If the errors are purely clerical they will bal-

ance against each other, the errors being revealed when the confirmations have been received.

The security record should be kept in the control of the auditor until all securities have been balanced or until all errors have been noted by him. If the latter is done, the errors may be followed up from his memoranda.

It will be seen that the confirmations are the main source for verifying the securities. Usually all errors will be located when the confirmations have been received. If after all have been received, errors still exist, each item in the account will have to be traced from the source of entry to its disposition. In this manner the error either will be found or information will be furnished as to its location.

Statements showing money and security balances, enclosed with a letter requesting confirmation direct to the auditor's office, should be mailed to all customers if possible, and lists of statements mailed should be prepared, these lists to be used later to compare with the confirmations when the latter are returned. If statements are not prepared and mailed for all accounts, a plausible reason should be given therefor and such accounts should be taken up with a responsible person. The investment accounts should be taken up with a member or members of the firm for the purpose of obtaining his or their confirmation of the money and security balances.

All accounts for which confirmations are being sent are naturally being verified by the auditor, provided the customers respond. All other accounts will have to be taken up individually as to their nature, such as certain private ledger accounts and income and expense accounts. As previously stated, the extent to which the audit is made will determine how far these accounts should be examined.

The cash should be verified by counting the cash on hand and verifying the bank reconciliations. A confirmation of the balances should be obtained by the auditor by correspondence with the banks. The state transfer stamps and the United States internal revenue stamps should be counted and compared with the records and the controlling accounts in the ledger.

The ledger accounts should be compared with the trial balance and the lists of customers' statements should be compared with the latter to see that the balances are in agreement.

An important feature of an audit and one which brokers are often desirous of having verified is the sufficiency of the margins in customers' accounts. Most brokerage houses require a minimum margin of ten points, and where the securities in the account are inactive or are high priced, a much larger margin is demanded. When calculating margins, the bid price of the market should be used, for if the securities were thrown on the market this would be the best price obtainable. Particular attention should be given to accounts with debit balances having no securities; also accounts with debit and security balances where no margin exists. As soon as such accounts and accounts with insufficient margin are discovered, they should immediately be brought to the attention of a member of the firm so that prompt action may be taken to save as much of the equity in the account as is possible or to limit the loss.

Where securities are owned by the firm it is good practice to inventory them on the most conservative basis, i. e., cost or market, whichever is lower, the exception possibly being where there is an abnormally low market for securities and it would not be fair to write off a large loss during the period, especially if the securities are permanent investments.

Other features of an audit should be the verification of income and expense accounts. The income is derived from securities owned by the firm, commissions charged for execution of trades and interest charged both to customers and brokers. Commissions are usually verified from the blotters and the interest from the press copy of the customers' statements. Commissions and interest as a rule are only tested, as it would entail a considerable amount of work to verify them completely, and generally a very good internal check is maintained by the office force.

The expenses, besides being those incurred in other lines of business, such as rent, salaries, stationery, telephone and telegraph, etc., would also include expenses incidental to the conduct of a stock brokerage business, such as stock exchange dues, printing of market letters, quotation sheets, financial papers, commission bills, etc. A test is usually made of expenses incurred, care being taken to see that such expense items are supported by properly approved vouchers. In cases where vouchers are missing, the items in question should be taken up with some one in authority.

Gratuities

By Joseph Robinson

While this discussion primarily concerns the accounting treatment of gratuities, it is worth while to give the authoritative definitions. *Words and Phrases* and Bouvier's and Black's law dictionaries all define a gratuity as being without valuable or legal consideration. The *Century Dictionary* gives this definition: "That which is given without claim or demand; a free gift; a donation." The lack of a comprehensive discussion of gratuities seems to be due to the fact that in the past they were very seldom encountered and when they were because of their trivialness they were considered as being merely "hold-ups" and were treated as miscellaneous or advertising expenses.

Now that hundreds of millions of dollars are being freely given to the Red Cross and other excellent causes, it is highly important that we carefully consider the correct accounting treatment of a gratuity so as properly to state the actual profits earned and carried to surplus and correctly to prepare the surplus statement.

A gratuity is a free gift, voluntarily given, for which the giver receives no valuable or legal consideration—such as a gift to charity, to relief work, to the Red Cross, etc. It is not a charge against profits or surplus because it is not an expense or loss incurred in the operations, transactions, management or administration of a business. The giver acquires absolutely nothing: he does not liquidate a liability. The giving of it merely causes a depletion of assets resulting from a withdrawal of undivided profits or surplus.

Possibly under peculiar conditions the giver receives consideration in the nature of advertising. In such a case it is correct to consider the disbursement a charge against advertising, but it should not be called a gratuity.

As to its effect upon the actual profits earned and the subsequent credit to surplus, the accounting treatment of a gratuity is similar to that of a dividend. It is as illogical to claim that a gratuity is an expense or a loss as to claim that a dividend is an

expense or loss. Both are withdrawals of profits or surplus. The gratuity is given to others than the stockholders; the dividend to the stockholders.

Assume that a company shows a net profit of $100,000 and upon investigation it is found that $10,000 had been given to the Red Cross and charged against profits. The profit and loss statement would incorrectly show net profits of only $100,000, while in fact the actual net profits were $110,000, $10,000 of which had been withdrawn and given away.

The correct procedure is to credit the actual net profits to undivided profits or surplus and to charge the gratuity thereto, not as a normal or an abnormal expense or loss, but as a withdrawal of undivided profits or surplus.

Very probably gratuities have been charged against profits because it has been considered that any diminishment of the net worth other than by payment of dividends must have been caused by normal or abnormal expenses or losses. And it is likely that it was for this reason that extinguishments of discount on capital stock were charged against profits.

There are four distinct ways in which surplus can be depleted. They are:

1. Current losses .... { Operating / Capital }
2. Abnormal losses...... { Operating / Capital }
3. Withdrawals .... { Gratuities / Dividends }
4. Transfers

The first and second are caused by business expenses or losses and result in a depletion of assets. The third results in a depletion of assets caused by a withdrawal of undivided profits or surplus, the amount withdrawn being given to the stockholders or others. The fourth does not deplete the assets. The profits and the net worth are absolutely unaffected. It is simply a procedure by which the liability upon surplus is diminished and the liability upon capital stock increased. Under no conditions should an amount appropriated to extinguish discount or capital stock be considered a charge against profits.

Miscellaneous Incomes of Public Institutions*

By Lloyd Morey, C. P. A.

The miscellaneous incomes of public institutions consist chiefly of fees of various kinds, sales of produce and manufactured articles and other unclassified items. They involve in different circumstances varying proportions of institutional income, being proportionally large in some cases, although proportionally small in others. However, they are always of great importance and in most cases represent a considerable extent of responsibility as well as a considerable amount of collecting machinery. It is important, therefore, that the system dealing with them be organized in such a way as adequately and fully to account for these classes of transactions. The matter of a proper auditing control of such incomes has not received serious attention.

It is not the purpose of this paper to discuss at length detailed methods of recording and disposing of miscellaneous incomes in different circumstances. Numerous types of forms and records will be found practicable in varying degrees, and it will therefore be of more importance that we consider certain general principles normally applicable to the handling of such items.

The first principle to be followed in the development of a properly controlled system for miscellaneous incomes is, we believe, the centralization of collecting responsibility. In other words one office or officer should be charged with the duty of collecting all accounts for moneys due the institution from these sources. Where this responsibility needs to be delegated it should be delegated by this officer, and he should be held responsible for all such delegation.

On the other hand it is equally essential that the collecting officer should not be responsible for the initiation of accounts for collection or for any accounting connected therewith. Other officers or departments should be responsible for initiating all such items. From these sources he will receive his authoriza-

*An address delivered at the annual convention of the Association of Business Officers of State Universities, Bloomington, Indiana, 1918.

tion for making the collection and will render reports on his collections back to their sources. His records will be subject, therefore, to verification against these independent sources.

Certain methods already found in various quarters are practicable in such a centralized collecting scheme. In the case of fees, such as student fees in an educational institution, or various other types of fees, the assessment of the fees should be made by a registrar or other officer in no way connected with the fee collection. His records should be so maintained, that the collections made by the financial officer, on the basis of his reports to the registrar, may be readily verified. Numerous types of stubs and multiple forms are adaptable to this plan.

In the case of sales made by departments a useful form can be introduced very similar to the system used in department stores. Reports of sales are made by the individual in charge of the material on sale slips, which are of convenient size, giving the name, the address of the party, the items, the price and the name of the person selling. Enough copies will be made to provide one for the buyer, one for the business office and one for the person selling. The copy for the business office will be forwarded to it and bills for collection prepared on the basis thereof. The slips being serially numbered a check can be made against the business office from the triplicate slips retained by the department. In case, in any circumstance, it is necessary for the department to collect the money, the slips may be used for the same function, by a simple indication that cash has been received, the cash being turned into the business office with its copy of the ticket.

In many instances, as for example where a creamery is operated, it is desirable to maintain a monthly account with patrons. In such cases especially it will be found practicable to provide a monthly combination ledger-statement form. These forms may be in triplicate, one set being provided for each customer, each month, and entries being made daily from the sales tickets or other reports. At the end of the month the accounts will be totaled, the original and duplicate copies forwarded to the business office and the triplicate copy retained by the department in charge. A regular check will be maintained between the triplicate accounts of the department and the collections as made by the business office.

A second essential principle associated with accounting for miscellaneous incomes consists of making proper record of all receivables in the general accounts, at the beginning of each fiscal period. A careful estimate should be made of the amounts of incomes from all these various sources. Proper general ledger debit accounts will be opened, and a corresponding credit will be made to revenue or some similar account. After reports are received from departments or other officers indicating that certain items are collectible, entries will be made in the general accounts, debiting accounts receivable under various classes and crediting corresponding estimated income accounts. Or, if a more conservative plan is desired, a reserve for accounts receivable may be credited until such time as the accounts are collected. After that is done proper entries are made to the credit of accounts receivable while the reserve account is debited and the estimated income account credited.

The various general accounts carried with accounts receivable should be supported by subsidiary accounts and kept in constant agreement with them. A useful plan consists of an accounts receivable register or similar record which in turn will be supported by the duplicate files of original bills. Where the number of such bills is not large it may be possible sometimes to dispense with the register.

The third principle of a properly controlled collecting system has already been suggested and consists of proper means of carrying out independent checks of accounts receivable and their collection. The most important feature necessary to carry out such a plan is that the accounts originate with persons other than the officers who are responsible for their collection and that duplicate records of the accounts as thus prepared be accessible. In many cases a ready check can be maintained between the collecting office and the department office through the monthly departmental reports prepared by the business office, on which will appear the credits for the various items collected. Other checks on sales can be conducted through perpetual inventories of materials. A regular control should also be maintained in the case of a cafeteria or other department where daily cash sales are made. A cash register under the control of the business office and checked daily by it will be most useful. Where a cash register is employed in the cafeteria the register should be used by the

person counting up the charge and a ticket printed by the register given to the customer, on the basis of which he should pay the cashier on leaving. The reading of the cash register therefore will indicate the amount of money to be collected from the cashier.

It is possible that the question will be asked regarding all this as to the importance of so much care. If we examine the extreme caution which is employed by our banks in handling every item of their transactions regardless of their kind or amount, and the provisions for the most complete check of every phase of their business, we will understand the soundness of the business policy represented in a well worked out system of controlling miscellaneous incomes. The centralization of such matters will be a great convenience to the members of the institution and to the public which deals with the institution. It will properly localize the responsibility for the handling of money. Most of all, it will constitute an adequate record and audit for an important and somewhat neglected group of public financial operations.

Setting Production Standards for Industrial Accounting and Engineering*

By F. J. Knoeppel, C. P. A.

The foundation for industrial accounting is built of standards—standards of time, material and cost. Trustworthy standards must be based upon standardized conditions. Naturally the installation of industrial accounting methods must follow rather than precede the installation of efficiency methods, since efficiency methods provide the standardized conditions and operations to be considered in the industrial accounting.

It is not meant that the installation of industrial accounting methods must await the complete installation of efficiency methods. Industrial accounting is an enlargement of the functions of cost accounting. After the production standards have been established, the cost accounting may be refined into industrial accounting. Efficiency work or industrial engineering may be started simultaneously in the two main branches of the work:

1. Building the organization, or personnel,
2. Setting the production standards, or standardization.

After the organization is provided for and the lines of authority and responsibility of the personnel are clearly established and the standards to be attained are placed before the organized personnel, the efficiency work takes on the characteristics of an intensive campaign. The contest is for the personnel to increase factory efficiency to attain the standards set. At this point, where standards are brought into practice, industrial accounting methods should be put into operation to aid the organization in its efforts toward higher efficiency.

Four basic standards are used in industrial accounting:

1. Standard number of man or machine hours per annum, reduced to a periodic average.
2. Standard number of man or machine hours per unit of output.

* Under *Fundamentals of Accounting for Industrial Waste* in the May, 1918, issue of The Journal of Accountancy the writer outlined briefly the use of standards in industrial accounting. The present article explains the methods of determining the four basic standards.

3. Standard cost per man or machine hour.
4. Standard material cost per unit of output.

Standards 1 and 2 are production standards.

Standards 3 and 4 are accounting standards.

The accounting standards cannot be determined until the production standards are known.

The production standards are based upon time and motion study and realized through incentives to workmen and coördinated planning.

TIME AND MOTION STUDY.

Time-study and motion-study are not synonymous terms.

Time-study determines length of time in which to perform an operation.

Motion-study determines the proper way in which to perform an operation.

Both studies, however, are combined in practice, and the persons making the studies must always consider both features.

The possibility of improvnng any conditions surrounding the work should be observed and noted. A stop-watch must be used to analyze time and motion. A number of studies should be made under each operation for various classes of work or component parts of product. Each operation is resolved into its elements or motions, and the time spent on each movement is determined by the use of a stop-watch, recording the time in minutes and decimal minutes. A time study on ordinary bench moulding is given as an illustration:

Operation	Elapsed time	Unnecessary time	Necessary time	Revised necessary time
1. Laying follow board and pattern,	4.1		4.1	4.1
2. Setting drag,	2.2		2.2	2.2
3. Getting riddle,	2.5	2.5		
4. Riddling sand,	2.5		2.5	2.5
5. Shoveling sand,	4.7		4.7	4.7
6. Ramming and strike-off,	17.4		17.4	12.5
7. Placing bottom board,	1.7		1.7	1.7
8. Getting clamps,	3.4	3.4		
9. Clamping and rolling over,	4.9		4.9	4.1
10. Placing cope side of pattern,	2.3		2.3	2.3
11. Waiting for cope,	10.2	10.2		
12. Setting cope,	1.9		1.9	1.9
13. Getting gaggers,	5.4	5.4		

Operation	Elapsed time	Unnecessary time	Necessary time	Revised necessary time
14. Riddling sand,	3.2		3.2	3.2
15. Shoveling sand,	5.4		5.4	5.4
16. Ramming and strike-off,	16.3		16.3	11.2
17. Lift cope and drawing patterns,	8.7		8.7	8.7
18. Finishing moulds,	24.6		24.6	20.
19. Waiting for cores,	12.3	12.3		
20. Setting cores,	7.2		7.2	7.2
21. Closing mould,	4.4		4.4	4.4
22. Clamping flask and weighing,	7.4		7.4	5.2
Totals,	152.7	33.8	118.9	101.3

REMARKS: Moulder can better time 4.9 min. on No. 6; .8 min. on No. 9; 5.1 min. on No. 16; 4.6 min. on No. 18; 2.2 min. on No. 22; total, 17.6 minutes. Unnecessary time due to workman 2.5 min. on No. 3; due to faulty conditions 3.4 min. on No. 8; 5.4 min. on No. 13; due to faulty planning 10.2 min. on No. 11; 12.3 on No. 19; total 33.8 minutes. Elapsed time 152.7, minus unnecessary time 33.8, minus improvement in time 17.6 = 101.3 net time.

The time study considered indicates a lack of four essential features of scientific management.

1. Lack of incentive to workman. The moulder would keep his riddle and other tools close at hand if proper incentives were provided for efficient workmanship. Operation 4.
2. Lack of standardized conditions. Clamps and gaggers should be supplied to moulders in ample quantities. Operations 3 and 13.
3. Lack of planning. Copes and cores should be sent to the workman before needed. Operations 11 and 19.
4. Lack of standard practice instructions. Revision of time taken on necessary operations 6, 9, 16, 18 and 22 indicates the necessity for instructing workmen through standard practice instruction.

Following the completion of time study work, standard practice will be developed, scientific planning instituted, conditions standardized and incentives provided. Industrial accounting is vitally interested in these features. Following the development of these phases of efficiency work an immediate improvement

may result, but a high increase in efficiency is not to be expected at once. Methods become habits—the old are gradually overcome and replaced by the new. Industrial accounting is the eye of the management, noting the progress of each feature of the efficiency campaign.

Standard practice instruction is a direct result of time and motion study. A number of studies must be made and changes in equipment may become necessary before standard practice instructions can be prepared. The standard practice instructions list the best sequence of motions comprising an operation and the tools, speeds and feeds to be used, together with the time allowed for each motion. A simple form of instruction sheet or card used for machining operations is shown as an illustration.

STANDARD PRACTICE INSTRUCTION NO.......

Sheets.... Sheet.... Date...... Drawing No... Machine No...

Component............ Operation............

Kind of material..... Total lot time.... Total piece time.....

Operation	Instruction	Tool	Cut	Feed	Speed	Lot time	Piece time
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

Lot time is separated from piece time, since work of preparation is the same for few as for many pieces. Suppose a workman is assigned to a job calling for 100 pieces, and the lot time is 22.5 minutes and the total time per piece 2.9 minutes. The standard for the job is found to be:

100 x 2.9 = 290 minutes, plus 22.5, or 312.5 minutes.

In determining the standard time to be established for each motion for incorporation in the standard practice instruction, the results obtained under a number of identic time studies must be reviewed. The revised necessary time must be considered, and a fair result found for use as standard. For example, five studies made on an operation may show.

1st	2nd	3rd	4th	5th	Total	Average
.24	.20	.23	.25	.29	1.21	.24

A single average, however, seldom works out satisfactorily, especially where a number of studies produce pronouncedly high results. These should be eliminated. There may be one very good result, but the remaining studies may be generally somewhat above the best result. Consequently an average of the results remaining after elimination of the excessively high readings would be influenced by the number of readings considered, i. e.

1st	2nd	3rd	4th	Total	Average
.24	.20	.23	.25	.92	.23

The best result seems to be obtained by averaging those above the best reading, after elimination of excessive readings, and again striking an average between the best and average reading, i. e.

1st	3rd	4th	Total	Average
.24	.23	.25	.72	.24

Average	Best reading 2nd	Total	Standard average
.24	.20	.44	.22

The times ultimately established for standard practice furnish the second of the four basic standards used in industrial accounting: standard number of man or machine hours per unit of output.

Incentives to Workmen

Incentives must be placed before the workmen, in the form of substantial rewards for their efforts to attain the standard times for operations as determined under time study and expressed in the standard practice instructions. The workman is rewarded in proportion to the efficiency attained. For example, a workman may be assigned a job standardized at 312.5 minutes, and actually complete the work in 345. minutes. His efficiency is

$$312.5 \div 345. = 90.6\%$$

A bonus is paid in addition to his day wage, based upon his efficiency. But the bonus must not be calculated on individual jobs. The general or collective efficiency during a full pay-period should be the basis for reward. Workmen's bonus record cards are used to ascertain general efficiency. An example is given in the following illustrative form:

WORKMAN'S NO. 432 HOURLY WAGE RATE 30c

Name Henry Jones DEPARTMENT X

BONUS RECORD

from (date) to (date)

Date	S. P. I. No.	TIME Std'd.	TIME Actual	% Effy.	Bonus
10/1	421	9.4	10		
10/2	280	4.2	4.3		
"	341	5.	5.7		
10/3	133	8.8	10.		
10/4	164	9.2	10.		
10/5	280	8.5	10.		
10/6	421	3.4	5.		
		48.5	55.	88.2	2.10

A bonus system provides for a variable percentage to be paid upon the wage earnings according to the percentum of efficiency. For example, the illustrative bonus record shows the workman's efficiency as,

$$48.5 \div 55 = 88.2\% \text{ efficiency.}$$

Under a bonus scale providing for a 15% bonus for 88.2% efficiency and 30% for 100% efficiency the actual labor cost (workman's earnings) and standard labor cost will be

Standard labor cost				
Wages 48.5 hrs. @ 30c	$14.55			
Bonus 30% on 14.55	4.37			
Total	$18.92			
			55 hrs. @ 30c	$16.50
			15% on 16.50	2.48
			Total	$18.98

The standard labor cost per hour will be

Wage rate,	30 cents
Bonus 30%	9 "
Total	39 cents

The hourly labor wage rate plus the bonus computed for 100% efficiency provides one element of the third of the fourth basic standards used in industrial accounting: standard cost per man or machine hour. Where labor is compensated under the straight piece rate system the wage rate considered in the determination furnishes the labor cost element of the standard cost per man hour.

Setting the bonus scale should be done with extreme caution. The result under the assumed efficiency of 88.2% indicates an eight cent gain in labor cost for 100% efficiency. The gain is negligible, but in view of the saving in hours amounting to 6.5 (55 minus 48.5), and the consequent saving in fixed charges through increased capacity for production the high rates of bonus may be warranted.

In setting the bonus scale the total possible saving should be determined, the proportion of the saving to be allowed to the workmen for 100% efficiency decided, and the minimum degree of efficiency warranting a bonus ascertained.

The elements of cost incident to operations, as non-productive labor, foremen's salaries, depreciation, heat, mechanical power, etc., which do not vary in the aggregate with natural

changes in productivity due to the varying efficiency of workmen, should be determined. These are termed constant departmental cost and should be reduced to standard cost per hour.

The possible saving at 100% will equal the possible reduction in time (ascertained by time study or from the cost records) multiplied by the labor wage rate plus standard constant cost per hour.

For example, assume,

1. Cost records show the average time per unit of output for the operation as 50 minutes.
2. Standard practice instruction calls for 40 minutes.
3. The wage rate per hour is 30 cents.
4. The constant departmental hour cost is 60 cents.
5. It has been decided to give 60% of saving to workmen for 100% efficiency.

The result is,

1. 40 min. ÷ 50 min. = 80% minimum of efficiency warranting bonus.
2. 50 min. — 40 min. = 10 minutes as possible saving in time at 100% efficiency.
3. Wages for 10 minutes @ 30 cts., per hr. $ .05
   Constant departmental cost for 10 min. @ 60 cts. per hr. .10

   Possible saving per unit at 100% efficiency, .15
4. 60% of 15 cents = 9 cents bonus to be paid per unit at 100% efficiency.
5. 9 cents ÷ 20 cents (standard wage cost per unit) = 45% bonus to be paid on wage earnings for 100% efficiency.

The bonus scale for varying degrees of efficiency must recognize these results, and the following points must be considered:

1. Workmanship is only recognized as efficient when above 80%.
2. Percentage of bonus at 100% efficiency can be safely set at 45%.

Obviously, a bonus scale should always be based upon the peculiar circumstances in each case, and in many plants it will be advisable to establish distinct bonus scales for differing operations when large variations in possible savings appear.

To illustrate, assume the facts considered in the foregoing example, with this exception, i. e.

The constant departmental hour cost is 15 cents.

The result is,

Wages for 10 minutes at 30 cts. per hr.	.05
Constant departmental cost for 10 minutes @ 15 cts. per hr.	.025
Possible saving per unit at 100% efficiency,	$ .075

If the 45% bonus previously found were applied on the wage earning per unit at 100% efficiency the result would be,

45% of 20 cents = .09

An actual loss to the company would result amounting to $.015 per unit of output.

Coördinated Planning

Planning is a centralized production-controlling function, exercised by a special department. Its purpose is to schedule production with reference to materials on hand, work in process and the availability of machines, dies, patterns, etc.

All orders must pass through the planning department, and no work can be undertaken in the shop except as authorized by the planning department. Manufacturing orders are analyzed as to materials required and the standard time required to perform the various operations involved. The work is assigned to workmen according to their availability, considering the amount of work, in standard time, ahead of each man or machine. Limited space will not allow a complete description of planning and control methods, and only those features directly affecting industrial accounting will be treated.

Coördinated planning considers the relation between the standard time of each operation on each part to the time on all other parts entering into an article to be produced. The necessary information is obtained from a manufacturing record, which specifies quantities of various kinds of materials required, operations to be performed and the standard time allowances. An illustrative form is shown for a simple case of regular production.

MANUFACTURING RECORD ARTICLE A.

GENERAL REMARKS...

Part No.	Quantity of part per article	Standard time per part				Standard part time per article				Material		
		Oper. V	Oper. X	Oper. Y	Total	Oper. V	Oper. X	Oper. Y	Total	Kind	Qty. per part	Qty. per article
421	2	1.1	2.5		3.6	2.2	5.		7.2	12x12" No. 0 sheet brass	14.39 lbs.	28.78 lbs.
422	1	2.	1.		3.	2.	1.		3.	1' round 2" alum. bar	3.668 lbs.	3.668 lbs.
423	1	1.5		2.	3.5	1.5		2	3.5	1' 1' brass rod	3.689 lbs.	3.689 lbs.
424	2	1.8		1.2	3.	3.6		2.4	6.	12"x12" 000 iron plate	15. lbs.	30. lbs.
TOTAL	6					9.3	6.	4.4	19.7			

As an illustrative case, assume that 200 articles A are to be produced.

Materials needed are:

200 x 28.78 lbs. of 12" x 12" No. 0 sheet brass = 5756. lbs.
200 x 3.668 lbs. of 1' 2" round aluminum bars = 733.6 lbs.
200 x 3.689 lbs. of 1' 1" square brass rods = 737.8 lbs.
200 x 30. lbs. of 12" x 12" 000 iron plates = 6000. lbs.

By reference to stores records the planning department is informed as to the quantities on hand, and whether or not the stock is sufficient to start operations. In most cases the information regarding materials is on separate bills of materials. But, regardless of how it is presented, the information must be available for such use by the planning department. The data regarding material is also used to ascertain the standard material cost. Legitimate waste in material occurs, and if such waste can be utilized the progress of the efficiency methods will have determined the best use for various kinds of waste and will have placed a value upon it.

The material required per part as exhibited in the manufacturing record or bill of material, priced at the general purchase price when the methods were introduced, less the value of waste, furnishes the fourth of the four basic standards used in industrial accounting: standard material cost per unit of output.

The time required to produce the 200 articles A is,

200 x 9.3	minutes,	or	1860	minutes	for	operation	V
200 x 6.	"	"	1200	"	"	"	X
200 x 4.4	"	"	880	"	"	"	Y

Properly to assign work, the relative time for all pieces and the relative time for operations on each piece must be considered by the planning department, but its treatment is beyond the scope of this article. The manufacturing record is, however, of importance in determining the first of the four basic standards used in industrial accounting; and calculations as illustrated must be made for the entire list of articles manufactured, to determine the balanced condition of the plant, since this also vitally affects the standard cost per man or machine hour.

Productive factory balance is usually one of degree, and efficiency methods aim to improve this balance. When all equipment can be fully utilized every hour of the manufacturing period

the productive balance is perfect. Where a regular and uniform product is produced for future sale this balance may attain a high degree, but the more diversified the production and the more it is dependent upon advance sales effort the lower the degree of possible balance to be attained. Two factors influence this productive balance:

1. Capacity of facilities.
2. Demand of products upon the facilities.

In turning chilled-iron rolls special lathes are used. The product may call for a certain amount of this work, possibly averaging 5 hours a day. The capacity of the lathe based on a factory schedule of 260 ten-hour days would amount to 2,600 hours, but the demand of the product upon the lathe would only amount to 5 hours for 260 days or 1,300 hours. The possible machine hours are 2,600 but the standard machine hours are only 1,300. Efficiency methods determine both the capacity hours and the standard hours. A close study of productive demand and productive capacity may result in changes being made to improve the balance, since productive balance vitally affects unit cost of product. The output of any article is limited by the lowest capacity of any single producing facility.

As an example, assume a factory engaged in the manufacture of three articles A, B and C. These articles are composed of the following parts processed in three departments V, X, and Y.

Article A					
Part numbers,	421	422	423	424	
Parts per article,	2	1	1	2	
Article B					
Part numbers,	422	423	424	425	426
Parts per article,	2	3	1	4	6
Article C					
Part numbers,	421	423	424	425	427
Parts per article,	2	3	1	4	6

The productive demand must be calculated upon contemplated production, which is based upon a knowledge of market conditions and past sales experience.

Assuming the contemplated production as

40,000 articles A
50,000 articles B
100,000 articles C

The necessary total numbers of various parts are:

Parts	For 40,000 articles A	For 50,000 articles B	For 100,000 articles C	Totals for A, B & C.
No. 421	80,000		200,000	280,000 parts
422	40,000	100,000		140,000 "
423	40,000	150,000	300,000	490,000 "
424	80,000	50,000	100,000	230,000 "
425		200,000	400,000	600,000 "
426		300,000		300,000 "
427			600,000	600,000 "

By applying the standard times per operation to the various parts, the standard times being taken as,

Part	Operations	
No. 421	V 1.1 min.	X 2.5 min.
422	V 2. min.	X 1. "
423	V 1.5 min.	Y 2. "
424	V 1.8 min.	Y 1.2 "
425	V 2. min.	
426	X .4 min.	Y .5 "
427	X .8 min.	Y .7 "

the parts are reduced to minutes required per operation:

Operation V

Part No. 421	280,000 x 1.1	308,000 minutes	
422	140,000 x 2.	280,000 "	
423	490,000 x 1.5	735,000 "	
424	230,000 x 1.8	414,000 "	
425	600,000 x 2.	1200,000 "	
		60)2937,000(	48,950 hours

Operation X

Part No. 421	280,000 x 2.5	700,000 minutes.	
422	140,000 x 1.	140,000 "	
426	300,000 x .4	120,000 "	
427	600,000 x .8	480,000 "	
		60)1440,000(	24,000 hours

Operation Y

Part No. 423	490,000 x 2.	980,000 minutes	
424	230,000 x 1.2	276,000 "	
425	300,000 x .5	150,000 "	
426	600,000 x .7	420,000 "	
		60)1826,000(	30,430 hours

The standard numbers of man or machine hours per annum equal

Department	V,	48,950 hours
"	X,	24,000 "
"	Y,	30,430 "

The capacity of the departmental facilities must be ascertained. Assume single-operation machines in each department, aggregating

Operation	V	15 machines
"	X	9 machines
"	Y	12 machines

The productive capacity for 260 ten-hour days is

Operation	V	2600 x 15 = 39000 hours
"	X	2600 x 9 = 23400 "
"	Y	2600 x 12 = 31200 "

Placed in comparison the results show:

Productivity	Operation V	Operation X	Operation Y
Capacity	39,000	23,400	31,200
Demand	48,950	24,000	30,430
Excess capacity	......	......	770
Excess demand	9,950	600	......

Expressed in percentage to demand the lack of balance indicates:

Operation V	20.3 %	minus
Operation X	2.5 %	minus
Operation Y	2.6 %	plus

The small percentum of variation in departments X and Y is negligible, but the capacity of V must be improved, or an actual curtailing of production will correspondingly result under operations X and Y. Four machines must be added in department V, or a change in contemplated production must be made. The additional four machines would raise the productive capacity of V to 49,400 hours—changing its percentage from 20.3% excess demand to .9% excess capacity. The standard number of man or machine hours remains as calculated for productive demand.

Analysis of contemplated production on the basis of improved productive balance furnishes the first of the four basic standards used in industrial accounting: standard number of man or machine hours per annum, reduced to a periodic average.

Completion of the third basic standard has yet to be considered. The wage rate per hour plus bonus at 100% efficiency equals the direct labor value of the standard cost per man or machine hour. Other departmental operating cost, as machine depreciation, non-productive labor, power, light, heat and supervision, are calculated and apportioned for each department on an annual basis. The results are divided by the standard number of man or machine hours per annum as determined for each department.

General operating costs divided by standard number of man or machine hours per annum, plus the hourly wage rate, plus bonus per hour at 100% efficiency, furnishes the third of the four basic standards used in industrial accounting: standard cost per man or machine hour.

Resumé

Determination of the four basic standards used in industrial accounting:

1. Standard number of man or machine hours per annum, reduced to a periodic average. Analyze the production contemplated on the basis of improved productive balance into total standard time required under each manufacturing process or department, and reduce to a periodic average.

2. Standard number of man or machine hours per unit of output—as embodied in the standard practice instructions and used by the planning department in scheduling production.

3. Standard cost per man or machine hour. Sum up for each manufacturing process or department the established hourly wage rate, bonus earnings per hour at 100% efficiency and the general operating cost reduced to an hourly rate based on the standard hours determined under 1.

Or, use piece rates instead of wage rate plus bonus earnings.

4. Standard material cost per unit of product. Value the material required as indicated by the bills of material or manufacturing record, at the general market price at the time the methods were introduced, less the value of any legitimate waste.

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EDITORIAL

File Early

Many accountants have been expressing the opinion that the treasury department should extend the time for filing all tax returns beyond the legal date, on the principle that every accountant's office is so overworked and the staff of men so small that it would be almost impossible to prepare the returns in time. It is pointed out that last year it was necessary to grant extensions. Arguing on the principle that the congestion of last year will be exceeded this year, accountants are already beginning to be fearful of the labors which will be thrust upon them during the coming winter months, and it is certain that there will be tremendous demands upon the profession in its efforts to comply with the requirements of the law and of business.

There is, however, another side to the question. The treasury is quite as hard pressed as are the accountants and while it is probable that the commissioner of internal revenue will act generously in regard to specific applications and in the light of individual circumstances, it is necessary that returns be made promptly in order that the taxes may be collected within the fiscal year.

If taxpayers will make a point of filing their returns at the earliest practicable date in each instance, the burden upon the treasury will be immensely relieved and, incidentally, the burden upon the accountants will be lessened. If there is no putting off until tomorrow what can be done today in the way of filing returns, it will be possible for the treasury to pursue a more liberal policy in the case of taxpayers who really need extra time.

Most of us are inclined to put off the filing of returns until the last week, if not the last day, of the filing period, when, as a matter of fact, the great majority of us could file our returns long before the termination of the period allowed.

Speaking numerically, probably seventy-five per cent. of individuals could file their returns during January, or as soon thereafter as the blanks are available, as conveniently as they could on the 15th day of March, but unless a concerted effort is made to secure early filing of returns, only a very small proportion of taxpayers will prepare and file their returns before they are compelled to do so.

In the case of corporations, it is of course more difficult to file returns early, but among smaller corporations the accounts are usually closed within thirty days after the end of their fiscal years. The returns of such corporations should be prepared and filed immediately thereafter.

Incidentally it may be noted that the pending bill lays stress upon the fiscal, rather than the calendar year, and unless this is changed before the bill becomes law, corporations and individuals who can conveniently do so should file their returns upon the basis of their fiscal, rather than their calendar years.

This brings us back to the question which has been discussed so frequently at meetings of the American Institute of Accountants and in the pages of this magazine, namely, the distribution of labor over the year. It will be remembered that the institute's predecessor, the American Association of Public Accountants, made great efforts to impress upon congress the desirability of allowing the filing of returns based upon the natural fiscal year of corporations, partnerships and individuals. This effort resulted in the permission to adopt a fiscal year terminating at the end of any calendar month in the case of corporations, and a similar permission has been written into the rules of the treasury department in regard to the reporting of profits accruing from partnership operations. So far individuals have not been given the privilege of reporting for any year other than that ending December 31st, but we trust that the option which has been given to corporations and partnerships with such beneficial results will shortly be extended to embrace all taxpayers.

Here, then, is an opportunity for the accountants of the country to render distinct service to the government and to themselves.

In the first place they can, wherever permissible, urge the adoption of a fiscal year not coincident with the calendar year. By so doing they can distribute the labor of preparing statements of account and tax returns. This will be of vast advantage to the overworked staff of the treasury department and, of course, of equal benefit to the accountants themselves.

In the second place, they can impress upon all taxpayers with whom they come in contact the importance of adopting a natural rather than a calendar fiscal year, and also urge that immediately following the completion of the statements of account, the tax returns, to be based upon such statements, be predared and filed.

There will, of course, be many cases in which it will seem necessary to ask for an extension of time. Circumstances in each case must be considered and, where it is inevitable that further time be requested, the permission may be asked in good faith and with fair confidence of success. It is altogether wrong, however, to ask for extension of time unless it be absolutely necessary. One of our greatest war efforts is the collection of taxes and anything which can be done to facilitate that effort should be done by every loyal American.

Naturally, the great bulk of returns will be based upon the calendar year, and we cannot get away from the heavy volume of work which must come in January and February; but everyone can do something to help distribute the burden and also to encourage prompt compliance with legal requirements.

It is an important matter, and we bring it to the attention of our readers in the hope that everyone will do something to expedite the preparation of returns. It is not merely a moral but also a patriotic duty so to do.

Trials Based On Questions of Principle

At the annual meeting of the American Institute of Accountants there were several trials of members of the institute, resulting in penalties ranging from reprimand to expulsion. The institute is justifying its claim that it can be trusted to main-

tain the professional standing of accountancy, and to inflict punishment where the council deems necessary.

One important feature of the trials so far held by the institute deserves consideration. This point is the omission or inclusion of the name of the client concerned, where charges are based upon the rendering of a statement or the certification of a statement at variance with sound accounting principles.

There is a natural disinclination on the part of accountants to bring charges that may involve the name of the client concerned and it is immensely gratifying to know that the council does not consider the inclusion of the name of the client to be at all essential. We believe that if this fact were generally known there would be a far greater readiness to make complaint of unprofessional practice. It is one thing to accuse a practitioner of wrongdoing and quite another matter to obtain the consent of a client to the introduction of statements which may be confidential and are almost certainly protected by professional etiquette.

At the recent meeting of the institute a case brought by certain members against certain other members was so handled by the complainants that the name of the company, whose reports were the subject of discussion, was not introduced. The defendants, on the other hand, brought in the name of the corporation, and by so doing introduced an element of concreteness which was neither desirable nor necessary. The council went on record as commending the action of the complaining members and deprecating the action of the defendants.

At the annual meeting of 1917 a somewhat similar case was tried in which both complainants and defendants omitted the name of the corporation concerned, and the case was tried purely on the questions of principle involved.

In nine cases out of ten there can be no necessity to go into minute detail. Charges almost always concern some accounting principle which is alleged to have been infringed by the defendant, and there is no reason why the trial should not confine itself solely to the broad general principles without concrete fact.

The complaints are generally based upon a specific instance of unprofessional or undesirable accounting practice, and, in the great majority of cases, the facts will be admitted. If defense be made it will generally be based upon a difference of opinion

as to what constitutes correct practice. Where there is admission of fact the name of the client is, of course, a matter of no concern.

There might be cases in which a practitioner would depart widely from the established principles of professional practice, and when charged with the offence deny the facts. In such cases it is conceivable that the reports concerned might be required in evidence, but even in such circumstances it would be possible to present the reports with names omitted, except in a very small number of cases.

If accountants generally understand that their clients can be protected by absolute anonymity there will certainly be a far greater inclination to clean house where house-cleaning is necessary.

When the American Institute of Accountants was formed, one of the chief merits claimed for the new organization was its ability to discipline members. In response to inquiries from important departments of the government as to what would be done in the case of false returns or erroneous statements of account, the promise was definitely given on behalf of the institute that there would be rigid, impartial justice and discipline whenever the occasion arose.

This promise must be kept, and, therefore, it is the duty of those persons, whether accountants or not, who discover instances of wrongdoing on the part of accountants, to bring the facts before the council of the institute so that the profession may be protected and the interests of the business and financial community may be surrounded with every safeguard.

Income Tax Department

EDITED BY JOHN B. NIVEN

The only regulation issued by the department during the past month (No. 2759) is given below. Congress is still engaged in its consideration of the new revenue bill.

TREASURY RULING

(T. D. 2759, Oct. 2, 1918)

Income tax.

Amending article 35, regulations No. 33, revised, and T. D. 2716, by providing that the first collecting bank or agent shall be the source of information in all cases of foreign items, except where the item is an interest item; that where a foreign country or corporation issuing the interest-bearing obligations has a paying agent in this country, such paying agent shall be the source of information; and that if no such agent has been appointed, then the last bank or collecting agent in this country which handles the interest item shall be the source of information.

(1) Article 35, regulations No. 33, revised, as amended by T. D. 2716, is hereby amended to read as follows:

ART. 35. Such returns of information shall be required, regardless of amount, in the case of payments of interest upon bonds, mortgages, or deeds of trust, or other similar obligations of domestic or resident corporations, joint-stock companies, associations, and insurance companies, and in the case of foreign items. The original ownership certificates, when duly filed, shall constitute and be treated as returns of information.

The term "foreign item," as used in this article, means any dividend upon the stock of a foreign corporation or any item of interest upon the bonds of foreign countries or foreign corporations, whether or not such dividend or interest is paid in the United States or by cheque drawn on a domestic bank. The term "foreign corporation," as used in this article, means one not organized and existing under the laws of the United States or of any state or territory thereof or of the District of Columbia, Porto Rico or the Philippine Islands.

Wherever a foreign country or foreign corporation issuing bonds has appointed a paying agent in this country, charged with the duty of paying the interest upon such bonds, such paying agent shall be the source of information. If such foreign country or foreign corporation has no such agent then the last bank or collecting agent in this country shall be the source of information. In the case of dividends on the stock of a foreign corporation, the first bank or collecting agent accepting such item for collection shall be the source of information.

Where bonds of foreign countries, or bonds or stocks of foreign corporations, are owned by citizens or residents of the United States, individual or fiduciary, or by domestic or resident corporations, joint stock companies, associations, insurance companies, or partnerships, ownership certificate 1001A shall be executed by the actual owner, or by his duly authorized agent, when presenting the item for collection, whether such item is a dividend or an interest payment, except in the case of a foreign country or a foreign corporation having paying agent in this country and issuing bonds which contain a "tax-free" covenant clause. In such cases the paying agent is required to withhold the normal tax upon the interest on such bonds, and ownership certificate, form 1000, properly modified

to show that the debtor has a paying agent in this country, should be used, unless the owner desires to claim exemption, in which case form 1001A should be filed.

Where bonds of foreign countries, or bonds or stocks of foreign corporations are owned by nonresident alien individuals, or foreign corporations, associations, or partnerships, ownership certificate, form 1071, revised, shall be used for and on behalf of such owners by any responsible bank or banker, either foreign or domestic.

Banks or agents collecting foreign items are required to obtain a license from the commissioner of internal revenue to engage in such business and are subject to such regulations for the furnishing of information as the commissioner, with the approval of the secretary of the treasury, shall prescribe, and to the penalties prescribed for failure to obtain such license (act of September 8, 1916, section 9 (f), as amended by act of October 3, 1917, section 1205). A blank application (form 1017) for such license may be obtained, upon request, from any collector of internal revenue. This license is issued without cost.

Foreign items shall not be accepted for collection by any bank or collecting agent so licensed unless indorsed as hereinafter provided or accompanied by proper ownership certificates (form 1001A, form 1000, properly modified as outlined above, or form 1071, revised, as the case may be), giving *all* information called for by such certificate. In all cases in which the first licensed bank or collecting agent is the source of information, such licensee shall detach the ownership certificate, and indorse on the item the words "certificate detached and information furnished," adding his name and address. Where an interest coupon is received for collection, the ownership certificate shall accompany the coupon to the paying agent in this country or if there is no such agent then to the last bank or collecting agent handling the item in this country. When more than one coupon of the same maturity is received at one time from the same owner and from the same issue of bonds, a single certificate may be used for all of such coupons. When foreign items have been indorsed as above prescribed, the certificates shall be detached and forwarded to the commissioner of internal revenue (sorting division), Washington, D. C., on or before the 20th day of the month following that during which the items were accepted, accompanied by a letter of transmittal, showing the number of certificates and the aggregate amount of foreign items disclosed thereon.

In all cases in which the paying agent or the last bank or collecting agent in this country is the source of information, the ownership certificate shall accompany the coupon to such agent or sources of information, who shall forward the ownership certificate to the commissioner of internal revenue, in the manner provided where such duty is placed upon the licensee: *provided, however,* that in case ownership certificate, form 1000, is used as provided above, the paying agent shall make return on form 1012, as provided in the regulations.

(2) In order that these requirements may be complied with, certificates form 1001A and form 1071 (revised) will be provided by the government and furnished to collectors of internal revenue for distribution to the public. Form 1001A, as hereby revised, shall be in the following form:

FOREIGN ITEMS

Form 1001A (revised). Names must be printed or written
United States Internal Revenue. plainly.

Ownership certificate—Tax not to be paid at the source.

[For the use of citizen or resident owners of stock of all foreign corporations and citizens or resident owners of bonds of foreign countries or foreign corporations not having a paying agent in the United States.]

DEBTOR ORGANIZATION.	OWNER OF BONDS OR STOCKS.
Name	Name ....
Address	Address ....

....

(On line above give full description of foreign item, date of dividend, or maturity of interest.)

I certify that the owner of the bonds or stock upon which the above-described income accrued falls within the class of persons or organizations opposite which such income is entered, and is entitled to receive the income reported without deduction of tax.

(Signature of owner or agent.)

....

Address of agent. ....
....

If owner is an individual, is he married?........

If not, is he the head of a family? ....

Owner.	Interest.	Dividends.
1. Citizen or resident of the United States, individual or fiduciary.		
....		
2. Domestic or resident corporation, association, or partnership.		
....		

Fiduciaries must enter under "Owner of bonds or stocks" the name of estate, trust, or beneficiary on behalf of whom this certificate is made.

If securities are owned jointly by several persons, one may sign, and the names, addresses, and proportion of ownership of each be indorsed on the back hereof.

NOTE.—The first licensed bank or collecting agent receiving this certificate is required to detach and forward it to the commissioner of internal revenue (sorting division), Washington, D. C., accompanied by a letter of transmittal showing the number of certificates and the aggregate amount of foreign items disclosed thereon; except that in the case of interest on bonds, the coupon accompanied by the proper ownership certificate shall be forwarded to the paying agent in this country, if one has been appointed, and in cases where there is no such agent the certificate shall accompany the coupon to the last bank or collecting agent handling the item in this country. The certificate shall be detached by the paying agent and forwarded to the commissioner of internal revenue with a letter of transmittal. If the debtor has no paying agent in this country the last bank or collecting agent handling the interest item shall detach the certificate and forward same to the commissioner of internal revenue in the same manner as prescribed in case the first licensed bank or collecting agent is the source. When the certificate is detached by the first licensed bank or collecting agent such bank or agent shall indorse upon the foreign items, "Certificate detached and information furnished.."

(Name and address of licensee.)

Date..................

T. D. 2716 and other rulings by this office in conflict herewith are hereby superseded and repealed.

Students' Department

Edited by SEYMOUR WALTON, C.P.A.

(Assisted by H. A. FINNEY, C.P.A.)

WHAT IS GOODWILL WORTH?

An article with the title *What is Goodwill Worth?* appeared not long ago in a business magazine of large circulation. In our opinion there are several serious errors contained in it, which should not be allowed to pass unnoticed.

In regard to the basis of valuation the article says: "The basis as used by most accountants is to set up the value of goodwill on so many years' average net profit earned by reason of the existence of goodwill. To find this profit it is necessary first to ascertain the average capital invested. A common error is to take only the profits for a number of years, to find an average yearly profit, and then to deduct the amount which the appraiser considers should be earned by a business in any event. The resultant figure is then called the annual profit due to goodwill.

"This method does not recognize the profits derived from the capital already in the business. Such profit should be estimated and deducted before any figure is reached which can properly be termed a value of goodwill. All money is presumed to earn at least a banker's interest. The goodwill is the earning power over and above that figure."

These two paragraphs contradict each other. The first one says that it is an error to deduct the amount which the appraiser considers should be earned by a business, and the second one says that the profits derived from the capital already in the business should be deducted. This seems to make a distinction between the amount which should be earned by a business and the amount derived from the capital already in the business. Of course, there is no such distinction. The amount fixed by the appraiser must be based on the profits which should be earned by the average capital invested in the business. In fact, the appraiser fixes the rate of profit which is to be considered normal. The application of that rate to the capital employed determines the amount of the profits. In the case of a sale of goodwill the rate is more often fixed by agreement between buyer and seller than by the estimate of an appraiser.

The article then gives an example as follows:

"It is easier to reason from a concrete example. Take the methods followed by the example shown on the sheet on this page. The average capital invested was arrived at by averaging the total preferred capital stock outstanding for the periods that were reviewed. Interest on this capital was computed at 7% because the concern's certificate of incorporation stipulates that the preferred stock of the company shall bear 7%, and because that is a fair return upon the investment in a private enterprise—always a rather hazardous venture for the investor.

"Besides, the deduction for interest upon capital invested is considered the compound interest upon the amount invested as goodwill. Inasmuch as the value of this intangible asset is something that will be realized upon in the future over a certain number of years, the fact is clearly presented that these earnings have been discounted or anticipated.

"The profits have to materialize before the amount invested in goodwill is recovered; and the interest upon the anticipation of profits is therefore a justified charge against the value of goodwill.

"The final excess of income over the cost of $1,295,731.64 extends over a period of eight years and eight months, which resulted in an average net yearly profit of $149,507.52. The average capital invested was $392,820, upon which the annual fixed interest charge of 7% is $27,497.40. The interest on the borrowed capital of the company is disregarded in our calculation.

"Before deducting the amount of compound interest due through anticipation of profits from the investment of goodwill, it is necessary to consider the number of years at which to capitalize this residue of earnings. * * *

"In the business which we are using as an illustration, it seemed that it would reasonably take 10 years to create a new goodwill. Therefore the value was capitalized at $1,220,101.20, less the deduction of $239,983.72, which represents the compound interest at 7% upon the anticipated profits for 10 years. The balance of $980,117.48 may be taken as the value of the goodwill.

REPORT ON
APPRAISAL OF THE VALUE OF GOODWILL

	Income from operations	Cost of operations	Excess of income over cost	Capital employed
6 months ending Oct. 31, 1909	6,955.77	2,068.79	4,886.98	50,000.00
6 " " Apr. 30, 1910	77,158.98	62,679.82	14,479.16	50,000.00
6 " " Oct. 31, 1910	108,632.83	77,423.38	31,209.45	50,000.00
8 " " June 30, 1911	247,852.27	200,531.99	47,320.28	50,000.00
6 " " Dec. 31, 1911	183,925.81	158,517.00	25,408.81	85,000.00
6 " " June 30, 1912	310,246.15	204,031.38	106,214.77	87,100.00
6 " " Dec. 31, 1912	242,459.27	162,765.20	29,694.07	90,600.00
6 " " June 30, 1913	453,972.16	308,425.83	145,546.33	96,500.00
6 " " Dec. 31, 1913	481,334.62	380,419.07	100,915,55	100,000.00
6 " " June 30, 1914	680,595.42	435,806.87	244,788.55	476,000.00
6 " " Dec. 31, 1914	348,946.24	279,013.60	69,932.64	414,000.00
6 " " June 30, 1915	739,470.47	489,371.54	250,098.93	329,000.00
6 " " Dec. 31, 1915	372,597.67	338,840.79	33,756.88	289,000.00
6 " " June 30, 1916	410,412.06	382,884.63	27,527.43	289,000.00
6 " " Dec. 31, 1916	429,739.30	409,856.12	19,883.18	274,000.00
6 " " June 30, 1917	528,784.95	395,210.39	133,574.56	274,300.00
6 " " Dec. 31, 1917	263,363.72	302,869.65	(39,505.93 loss)	400,000.00
TOTALS	5,886,447.69	4,590,716.05	1,295,731.64	3,404,500.00

Total excess of income over costs for eight years and eight months........	1,295,731.64	Capitalized at 10 years	1,220,101.20
		Less compound interest at 7% on profits anticipated by capitalizing	239,983.72
Average yearly profits...............	149,507.52		
7% on ($392,820) average amount of preferred stock issued and outstanding	27,497.40		
	122,010.12		
	1,220,101.20	Value of goodwill Jan. 1, 1918......	980,117.48

"This sheet shows in detail how the 'goodwill' valuation of one concern was figured."

It will be noted that "the average capital invested was arrived at by averaging the total preferred stock outstanding for the periods that were reviewed." No explanation is given for the use of preferred stock alone in arriving at the average capital. It could only be because the common stock did not represent any real assets at all, but even then the calculation would be erroneous. The capital invested is not the face of the stock, whether preferred or common, or both. It is the sum of whatever capital stock is actually invested in good assets and all the accumulated, undivided surplus which is also represented by assets. In other words the capital invested is the net worth of the business.

Referring to the preferred stock, the author says: "Interest on this capital was computed at 7% because the concern's certificate of incorporation stipulates that the preferred stock of the company shall bear 7%, and because that is a fair return upon the investment in a private enterprise."

The question as to whether 7% is a fair return upon the investment has no bearing on the proposition whatever. The deduction from the total profits of profits amounting to 7% on the preferred stock is made because the profits to that extent are devoted to the payment of a fixed rate on the preferred stock, and therefore cannot be used for any other purpose. That rate may be inadequate or it may be excessive. It must be used nevertheless.

The next step in the example is: "Besides, the deduction for interest upon capital invested is considered the compound interest upon the amount invested as goodwill. Inasmuch as the value of this intangible asset is something that will be realized upon in the future over a certain number of years, the fact is clearly presented that these earnings have been discounted or anticipated.

"The profits have to materialize before the amount invested in goodwill is recovered; and the interest upon the anticipation of profits is therefore a justified charge against the value of goodwill."

This introduces the element of compound interest upon the amount invested in goodwill. As far as we know this is the first time that interest has been made an element of goodwill. This could be a correct procedure only on the theory that the profits capitalized as goodwill constituted an annuity terminable at a fixed future date. It would therefore be in the nature of a premium paid for the business exactly similar to the premium paid for bonds, both premiums arising from the same cause, the excess of revenue above the normal rate.

However, there is a radical difference between the two premiums. Bonds have a definite date of maturity at which all premium paid disappears. Therefore the premium must be written off during the life of the bonds. No such condition attaches to the goodwill of a business. If the management continues to be efficient, the goodwill, instead of expiring at the end of a fixed time, will continue to be valuable, probably more valuable than ever. It does not even cease if the company owning it is obliged to go out of business by the expiration of its charter. because it can be sold, along with the other assets, to a new company.

The treatment of goodwill as the present value of a terminable annuity requires that a definite portion of it should be written off against profits annually. This is not only contrary to the general opinion of accounting authorities, but is also out of harmony with the characteristics of goodwill itself.

Whatever may be said of the article as so far considered, there is no question about the flagrant violation of a well established and universally recognized accounting principle in the calculation of the average profit. Nothing is more dangerous than the use of averages by those who do not fully understand their meaning.

There is no accounting principle that is better established than the one which forbids the use of an average rate of profits unless those profits are virtually uniform for all the years covered, or have been gradually increasing from year to year. While the statement of the general average is true, it is misleading, when used as a basis for the calculation of future profits or of goodwill when the profits are decreasing or are of a violently fluctuating character. No dependence can be placed on the future when the past shows that the course of the business is unreliable.

Reference to the table showing "how the goodwill valuation of one concern was figured," will furnish a full justification of the charge of the flagrant violation of accounting principles. The excess of income over cost shows no stability whatever, and the last 30 months show a most decided decrease below the average of the previous 74 months, ending with an actual loss in the last period of six months. If the percentage of profits to capital employed is used as a basis of comparison, it exhibits a still more erratic fluctuation, varying between 150.8 per cent profit in the first half of 1913 to 9.9 per cent loss in the last half of 1917. The capital employed is the preferred stock, as already stated.

No dependence can be placed on these figures. Unless some good reason can be given for the sharp decrease in profits towards the last, with a virtual certainty that there will be an immediate and permanent recovery, no reputable accountant would appraise the goodwill as more than speculative. To give it a valuation of $980,117.48 would be an absurd over-valuation. It is based largely on five or six exceptionally profitable periods which are by no means certain to recur.

The writer of the article also states: "If the new company purchased the goodwill of another business, then it is proper in the first year to charge this goodwill at the amount paid for it. After the first year the

actual figures of the earning power of the asset should be taken on the performance records and the purchase price discarded."

This is absolutely contrary to all good accounting authorities. Goodwill can appear in the accounts as an asset valued at what was paid for it—never for any more, and only for less if it is determined to write it off gradually as an undesirable asset. If in a going concern increase in the goodwill is credited to profits, there results a swelling of the profits which is not realized and which is liable to shrinkage. As the increase in value is caused by the increase in actual profits, and as these profits have already been taken into account, the addition of the increased value of the goodwill to the profits will cause a doubling of the apparent gains and thus may lead to the impression that the business is doing twice as well as it really is, and may lead to further increased dividends not authorized by the real conditions.

Carrying Stock in Other Companies

Editor, Students' Department:

Sir: In referring to Mr. R. J. Bennett's book, *Corporation Accounting,* pages No. 129 and No. 130, paragraph 114, I observe a point in connection with the entries incident to the purchase by a corporation of the stock in another company, which is contrary to my idea of the correct handling of same and regarding which I would like to have you enlighten me.

To quote from the above: "Such investments are usually entered up at cost price and, when sold, at the selling price, the profit or loss sustained as a result of the sale, will, of course be carried into the profit and loss account. To illustrate the entries involved, assume that the American Trading Company has purchased $300,000 par value of stock of the Baldwin Mercantile Company for $250,000. It later disposes of $40,000 face value of this stock for $50,000, thereby netting a profit of $10,000." The following entries are required for the proper recording of the transaction:

Stock of other companies	$250,000	
To cash		$250,000
For purchase of $300,000 par value of stock of the Baldwin Mercantile Company.		
Cash	$50,000	
To stock of other companies............		$50,000
For sale of $40,000 par value of stock of the Baldwin Mercantile Company.		
Stock of other companies	$10,000	
Profit and loss		$10,000
For profit on sale of $40,000 par value of stock of the Baldwin Mercantile Co.		

Am I right in my idea that the investment account, which has been charged with the cost of the stock, should be credited with only the cost of the stock sold and the actual profit carried to profit and loss account?

It is obvious that, if the investment account is credited with the par

value of the stock sold, it will create a balance of $210,000, representing 2,600 shares, the cost of which is $216,666.67. I think entry should be as follows:

Cash	$50,000	
To stock of other companies		$33,333.33
Profit and loss		16,666.67
To record sale of $40,000 par value of stock of the Baldwin Mercantile Company (cost price $33,333.33) for $50,000.		

Thanking you for any criticism you may see fit to make, I am

Yours truly,

Richmond, Virginia. F. M. K.

I think that you are entirely correct in your contention that stock of other companies should be credited at cost for the portion sold. Crediting at par stock that was bought at a discount reduces the carrying value per share of the stock that remains. If it is desired to be conservative and reduce the value, it should be done by a specific entry, giving the proper explanation.

It is not considered the best accounting practice to credit the profit made to profit and loss. That account should be used purely as a clearing account for normal operations. Unless the American Trading Company was engaged in the business of buying and selling stocks, the profits made in this case would be extra-normal and should be credited direct to surplus.

Express Charges

Editor, Students' Department:

Sir: In our plant we receive express packages collect. These packages are received by our receiving room and paid once a month to the express company. When we receive the bill at the first of the month we find a great deal of trouble in checking it back to the invoices.

I suggested that the receiving room should have a petty cash account on the imprest system and pay for the express packages as received.

Kindly advise me the best way of handling express packages collect.

Yours very truly,

I. P.

Your idea of having an imprest petty cash for the express charges is a good one, but is open to the objection that there is no check on the receiving clerk, if he is the only one to receive the package and also pay the charges. It would be as hard to check him up as it is to check up the express company.

If the express company will agree to hold and present the orders, I suggest that you have printed a blank order on the office requesting it to pay——dollars for——packages received this day, to be signed by the receiving clerk and given to the express company. These orders must be attached to the monthly bill of the express company. Each day being correct the total must also be correct.

Wrong Posting of a Correct Entry

Editor, Students' Department:

Sir: In Montgomery, we note in regard to errors of principle that "the most common error is to debit an asset instead of an expense account." If an error occurs in the posting of a correctly stated journal

entry, is such an error one of principle or merely a clerical error? For instance, the following journal entry:

Plant expense	$100.00	
To accounts payable		$100.00

is debited to plant (asset account). To which class of errors does the above belong?

Yours truly, G. E. H.

Pittsburgh, Pennsylvania.

I should say that the wrong posting of a correct entry was a clerical error, and not an error of principle. The latter must be an intentional or ignorant violation of some accounting principle. The entry being correct there was no intention to deceive, therefore the wrong statement results purely from the error in posting, not from any error in the entry itself.

It is allowable to correct such an error by erasure. Red lines can be drawn through the item in plant account, and the item can then be posted to plant expense. A journal entry is not necessary.

Making Good Previous Losses of Capital

Editor, Students' Department:

Sir: As a bookkeeping student I desire to ask a question relating to a condition that has come up in my own work as follows:

The stock of bank 1 is supposed to be worth $160.00 per share, and this is borne out in financial statements. But there is a lot of worthless securities carried on books at a given value to make the above showing, whereas, if these securities were carried at actual value, the condition of the bank would not show up so well.

Bank 2 decides to buy up the stock of bank 1 and, after investigating, it buys practically all the stock at $131.00 per share. Then bank 2 liquidates, and officers take over bank 1 and the securities including the stock of bank 1 are transferred to the books of bank 1. For about five days bank 1 owned its own stock which was transferred from bank 2 at $131.00 per share. Now bank 1 sells or lets this stock out to desirable persons at $160.00 per share. A few stockholders whose stock was not purchased at $131.00 put up with bank 1 the additional $29.00 per share. There were 500 shares and this action was taken to keep the stock at $160.00 per share. The worthless securities above-mentioned were depreciated, making the stock worth about $131.00 per share, and the above action was taken to maintain the value at $160.00. The difference, $29.00 x 500 shares was carried to surplus to offset an amount taken out to offset the depreciation on the securities.

It appears to me that the difference between the $131.00 per share, the cost price, and $160.00 per share, the selling price, is the profit, but the officials of the bank maintain that it is not, as the action was taken to keep up the surplus at the usual amount and to make the stock worth $160.00. I cannot grasp their idea, and they propose to fight my idea.

Will you please help me? I can't see it but one way. Hope I have given you sufficient information to enable you to answer.

Yours very truly,

J. M. F.

It cannot be possible that you have stated your bank problem correctly. You fall into the common error of confusing the bank with its stockholders.

When bank 2 bought the stock of bank 1, it bought it from the stockholders. What price was paid is entirely immaterial. The general books of account of bank 1 are not in the slightest degree affected, the only changes being on the stock ledger, where the stock is always treated at par, if any value is expressed.

When bank 2 liquidated, the process would consist of the collection or sale of its assets and the distribution of the proceeds among its own stockholders. Bank 1 would have nothing to do with the transaction, except to transfer its stock to the persons to whom bank 2 sold it. It would be impossible to transfer the securities, including the stock of bank 1 to the books of bank 1, unless bank 1 bought the net assets of bank 2, which is not part of the problem as stated by you.

Assuming that bank 1 did buy the net assets of bank 2, the proper procedure on the part of bank 1 would be to write down its surplus to $31.00 per share. As there were 500 shares, it should make a journal entry:

Surplus	$14,500.00	
to over-valued assets detailed..		14,500.00

each over-valued asset being credited with the proper amount to bring it to its real value.

The book value of the stock is now $131.00 and the purchase of the stock held by bank 2 represents neither a profit nor a loss.

The stockholders whose stock was not bought now pay in $29.00 per share to bring their stock to $160.00 and the new stockholders pay in $160 per share, which means that they pay $131.00 for the actual value of the stock and then they also contribute $29.00 per share to bring the stock to $160.00. A total of $14,500.00 is therefore credited to surplus and charged to cash.

This $14,500.00, although credited to surplus, is seen by this statement of the case to be a contribution to capital, and not to be a profit. The surplus and undivided profits of a bank, or of any other corporation, are really additional capital. In a partnership they would be added to the capital account at once. The fact that the capital stock of a corporation is a fixed quantity does not change the principle that profits left in the business are a part of the capital.

Bank 1 had impaired its total capital $14,500.00. Its stockholders, new and old, contributed cash enough to bring the capital back to its previous figure. It was a donation and not a profit.

Bonus Stock

Editor, Students' Department:

Sir: I was much interested in the article *Unpaid Capital Stock* by Joseph Robinson in the April number of The Journal of Accountancy.

My attention was directed to his statement that "Discount on stock should never be shown on the asset side of a balance-sheet. It can never be an asset or a deferred charge."

Although I can readily see the logic of his statement I am at a loss to understand how I can present our problem differently, and I would appreciate an explanation of just how it should be done.

This is my problem. We are authorized by the state to sell our stock at par value $100.00 and with every four shares of preferred stock, which we sell at par, we are permitted to give a 25% bonus, that is, one share of common stock free.

Now I have been showing this stock bonus as a deferred asset on the balance-sheet. I cannot deduct this from capitalization as I deduct from capitalization preferred and common stock as subscribed. If I do so I

am on that account entering this common stock bonus twice on the liability side of the balance-sheet.

Should I keep carrying this as a deferred asset to be charged against profits annually? Mr. Robinson suggests that this can be handled not by a charge against profit, but as a retention of profits in the business. How would this affect its appearance on the balance-sheet?

I shall be truly grateful if you give me a solution as to how I should handle this.

Very truly yours,
H. A. L.

Akron, Ohio.

I cannot see that there is any material difference between discount on stock and discount on bonds, except that as the bonds have a definite life, the discount on them must be taken up in a specified time.

As stock certificates are issued for the par of the stock, whether that stock has been paid in full or in part only, and even when given away as a bonus, I do not see how we can avoid carrying the capital stock account at par. As I understand it, in case of liquidation of the company, each share of bonus stock would rank equally with all the other shares of the same class of stock. This would seem to necessitate an equal expression of value on the books. If this is the case I do not see what disposition can be made of discount except to carry it as a deferred charge.

If all the common stock is given away as a bonus, as is sometimes done, Mr. Robinson's balance-sheet would show no common stock outstanding, if he deducted the bonus stock from the total issue.

I think your treatment of the given away stock is correct, if you call it bonus stock and not discount on stock. Stock absolutely given away is not sold at a discount.

Increase in Market Price of Fixed Assets

Editor, Students' Department:

Sir: The company with which I am connected is having an appraisal made of its buildings and equipment. In 1916 the plant was first appraised and the new values set up on the books. It is now proposed to change these values, and the same buildings and equipment will presumably be considerably increased in value. A debit will be made to plant and equipment account, and a credit to a special surplus or, what is more probable, to the regular surplus account will also be made. I have argued against changing our present values of buildings and equipment, as it does not seem to me to be good accounting. Our plant is highly specialized and could hardly be used for any other purpose.

It is my contention that plant and equipment in all cases should be maintained at cost and, aside from the recognized depreciation, should not be affected by other considerations such as the present unusual cost of reproduction. Any improvement in location such as brought about by the building of a railroad near the plant will be shown in increased profits, presumably.

I should like very much to know if there is any settled opinion on this point of handling appreciation of fixed assets of manufacturing plants. I should greatly appreciate anything you may say that will set me right if I have gone astray in my reasoning.

Very truly yours,
R. S. T.

Niagara Falls, New York.

There is no point in accounting upon which there is more settled opinion than that an unrealized appreciation of fixed assets should not be taken into account.

The fact that market increases in the cost of reproduction seem to indicate an increased value of an asset does not make the asset of any greater value to the manufacturing plant, because of the fact that it is a fixed asset, not a current one. The value of a manufacturing plant lies in its productive power, not in its market value. If the plant were to be sold, the profit might be realized, but as long as the plant is to be retained for productive purposes, the profit cannot be realized. In any event it could be realized only by a sale and not by a mere fluctuation. If the appreciation is taken into account, it means that the asset account will be increased and hence a larger amount of depreciation will necessarily be written off in order to reduce the asset to scrap value at the time when it will have to be discarded. In the long run, therefore, no advantage will be gained because of the fact that the credit passed to surplus at the time the appreciation is put on the books will be offset by the larger charges to manufacturing cost on account of depreciation and the consequent reduction in the apparent profits from operations. Hence at the very best, the writing up of a fixed asset is merely an anticipation of operating profits, and at the worst it is an anticipation of profits which may prove to be fictitious ones. There are many cases on record where property has risen in value on the market and been written up, only to decline again and have to be written down. If the credit to surplus of such increases in value is used as a basis of a dividend, there is no better established point in legal accounting than the rule that the directors would be liable for the payment of dividends out of surplus which really resulted in an impairment of the capital.

As a sop to the managers who insist upon placing the appreciated value on the books, some accountants allow the increase to be placed in the asset account but to be offset by a credit to a reserve for unrealized profit on appreciation of fixed assets. This reserve must be rigorously kept out of the surplus. The depreciation reserve can then be built up by the same additions that have heretofore been made, so that when the asset is discarded, the sum of the depreciation reserve and the reserve for unrealized profit on fluctuation of fixed assets will be sufficient to take care of the loss in capital incident to the discarding of the plant.

Interest on Deferred Purchase Price

Editor, Students' Department:

Sir: If the following questions possess sufficient merit, I would like to see them discussed in The Journal of Accountancy:

B, reorganized company, takes over from A, a dissolving company, among other assets, $25,000.00 par value preferred stock of company C. Further, B gives notes in the amount of $75,000.00 for a par equivalent of the same stock, which is immediately put in escrow as collateral against a licensed agreement entered into with C.

The notes are payable in the amount of $5,000.00 a month and when paid, the stock certificates are to be delivered by the escrow agent as and when canceled notes are presented by B.

C is a company capitalized at $350,000.00, organized for the purpose of receiving the royalty to be paid by B on the licensed agreement referred to. The notes payable referred to carry interest at 6%, which begins to run a little less than two months prior to the date of reorganization, and which must, of course, be paid on each note at maturity before cancellation.

How should such intrrest be treated in the accounts? Are we entitled to add any interest to the original investment account charge of $100,000.00?

If so, shall the addition be of the interest as paid or as accrued?

Is such interest a charge against profit and loss as a cost of having and retaining control of so many shares of stock, and the attendant right of receiving dividends thereon?

What bearing, if any, would such interest have as earnings of C out of which C can declare dividends, a portion of which would accordingly come back to B as income?

Could such interest be considered as a deferred charge analogous to stock discount on stock sold, and as such to be written off over an agreed period of time?

Could it be considered as a deferred charge which could be written to the investment account, as soon as all the payments had been completed?

Could the entire amount of interest to be paid be considered a part of the purchase price of the stock and be charged to the investment account immediately, provided the corresponding accrual was set up on the books?

Assuming that an additional $100,000.00 of the same stock was purchased by B, payable in monthly instalments of $5,000.00 each, covered by notes payable as in the preceding case, charging the same rate of interest, how should it be shown in the balance-sheet and how should the income be taken up?

A discussion of the points raised will be highly appreciated by

Yours truly,

G. McA.

The interest is undoubtedly a financial expense. It is not an operating expense, because it is not essential to the conduct of the business.

No interest can be added to the investment account of $100,000 either when accrued or paid. There is always a strong inclination on the part of the managers of a business to capitalize interest on deferred purchase obligations, whether for investment securities as in this case, in the case of partial payments on Liberty loan bonds, or on machinery or other fixed assets bought on the instalment plan. An analysis of the conditions will show why it is wrong to take such a position.

In its essential features the stock transaction is that B bought from A $25,000 of C's stock, paying for it in cash or its equivalent in taking it over with the rest of A's assets. Then B bought from C $75,000 more of the same stock, borrowing the funds with which to pay for it. The fact that B borrowed the money from C is not material. The effect is the same as if a loan had been secured from S, or from a bank, and C had been paid in cash. In fact, it would be the same if B had happened to have been temporarily in funds so that it could have paid cash to C and had not been obliged to borrow anything for some time, when it became necessary to make good its working capital.

The interest on the deferred payments is $3,000. To this is to be added nearly one per cent accrued prior to the beginning of the agreement, if this is what is to be understood. This will make this stock cost 165, while the same kind of stock bought at the same time cost only 100. There is nothing to justify this difference in price, except the fact that B did not have ready money enough to pay cash for the stock.

Any argument that would seek to justify the charge of this interest to the investment account would apply with equal force to the payment of interest on a note given for raw material or other merchandise.

The interest could not be considered as a deferred charge analogous to discount on stock sold, because the analogy does not exist. If the business of B were such that it took some time to establish it on a paying basis, part of the expense of establishing it might be carried over as re-organization expense, and this interest might be included in the amount, on the ground that the possession of the C stock would benefit future operations and therefore that the future should pay the expense of carrying it. This does not change its character as a financial expense—it merely defers it.

The interest is a legitimate earning for C and is credited to its interest account, in exactly the same way as would be any interest charged on the notes receivable given to it by ordinary customers.

On the balance-sheet of B, this stock would appear in the classification "investments" among the assets for its par value. The unpaid instalment notes may appear as a liability as "purchase money obligations on C stock," or as a deduction from the asset, with the net amount carried out as the equity in the stock. The latter would be the preferable treatment. The interest accrued to date on the unpaid notes would appear as an accrued account payable, having been charged to interest. If an additional $100,000 of the stock was bought on the instalment plan, it would be treated in the same way.

Vouchers: Distribution of Expenses

Editor, Students' Department:

Sir: Your valued opinion on the following points would be greatly appreciated.

1. What vouchers should an auditor call for in the case of securities bought and sold?
2. In examining purchase invoices, it frequently happens that some are dated some months prior to the period under audit. What steps should the auditor take to ensure that such invoices are not put through twice?
3. The expenses of a manufacturing business are usually classified under manufacturing, selling and administrative. Under which classification do the following belong: (a) containers, i. e., the box containing a dozen bars of soap, the packing case for a piano, etc., (b) freight outwards, shipping and delivery expenses?
4. What is the correct method of dealing with by-products? Should any part of their value be deducted from the cost of manufacture of the principal product, and if so, how should such value be ascertained?

Thanking you in anticipation, I am

Yours faithfully,

Toronto, Ontario. Ignoramus.

1. The proper voucher for purchase or sale of securities would be the statement rendered by the broker.

2. The date of a purchase invoice should correspond with the date of its entry on the books. To avoid passing the same invoice twice an auditor must mark each one as he checks it. To avoid passing a duplicate of an invoice already paid, the auditor should require that each invoice be accompanied with evidence of the receipt of the goods. Absence of this evidence should cause him to reject the invoice.

3. Containers that are necessary to hold the goods when delivered to the customer are a manufacturing expense; others are a selling expense. For example, the tin cans for salmon are a manufacturing cost, but the wooden cases in which they are shipped are a selling expense.

Freight outwards, shipping and delivery are all selling expenses.

4. By-products should be credited to the cost of manufacturing the main product, being a saving of part of the cost of material. After being charged with the cost of selling them they should be credited to the manufacturing account at the net price realized. The principle is the same as that which governs the sale of scrap.

Correspondence

Shortage of Accountants

Editor, The Journal of Accountancy:

SIR: I send you herewith copy of an article which appeared in an accounting periodical in Glasgow, Scotland. This article may be of interest to the professional accountants on this side, as it demonstrates how essential they are to the country at this particular period.

Yours very truly,

D. HUMPHRIES.

New York.

To the Editor of the Daily Telegraph:

SIR: It is admitted by everyone who knows the circumstances that at the present time there is almost a famine of qualified accountants, and it is needless to labor this fact in the face of the revelations exposed lately in ministry of munitions, and so short is the country of accountants it has been necessary to recall as many as possible from the combatant ranks, and also to obtain help from abroad; while there are also special instructions issued to tribunals with regard to their indispensability and exemption. The consequence is that many young and healthy men of military age have of necessity been kept out of the fighting ranks. I do not for a moment question the wisdom of this step, for if there is to be any proper control of the enormous expenditure now going on it can only be checked by those qualified to deal with it. What I desire to suggest is that the government should take steps to try and remedy this shortage by offering special facilities and opportunities to wounded soldiers and other suitable candidates to acquire this special knowledge by means of training schools under the administration of qualified accountants. I would particularly emphasize the opportunity that would thus be offered to wounded soldiers with an aptitude for figures of acquiring a profession of great value to them after the war. In the training I suggest, frequent examinations should be held, to test the progress of the candidates, and if a candidate is found wanting in the necessary aptitude he should not be retained.

Trained accountants will be required just as much to clear up the aftermath of the war as now, while, with the expansion of trade which is to be expected when the war is over, the opportunities for employment should be much increased. It will be argued by the "trade unions" in the accountancy profession that it is impossible to make a qualified accountant without years of training and experience, but the war has shown the fallacy of most preconceived ideas—gunners and air-men can now be trained in a few months, and even cabinet ministers have risen from obscurity in the course of a year or so. Therefore, why cannot qualified accountants be made within a reasonable time, given the opportunity of training?

Yours faithfully,

G. BETTESWORTH-PIGGOTT,

Deputy-Chairman, Appeal Tribunal, House of Commons.

Interest and Cost

Editor, The Journal of Accountancy:

SIR: In the matter of charging interest as an item of manufacturing cost, it appears to the writer that the proposition is indefensible even for comparative purposes.

In order to have a basis of understanding, we state that we understand cost, in this instance, to be the necessary elements in the proper fixing of the price of an article.

We contend that rent and interest are the result of high prices and not the cause of them.

In considering the three elements of cost, namely: land, labor and capital, it seems manifest that any plurality of ownership of either land or capital should not add to the cost of production. Labor does not seem to enter into the discussion directly at this time.

It may be remembered that one of the speakers at the convention of the American Institute of Accountants, mentioned that a machine represented labor, compressed as it were, in inanimate form, and the writer understood that the idea was that the capital value of the machine must be supported just as a laborer must be.

Leaving the moral status of labor out of the question, is not the capital value duly supported in the upkeep charges and amortization provision? We think the aim of all accounting is to that effect, and that is distinct from interest on the amount invested in the machine.

Will not the segregation of capital into departmental divisions show by means of the return thereon the true condition of the investment better without the intervention of interest than with it?

Will not investment more likely seek its proper level without the interference of arbitrary interest charges, which, when not the result of actual transactions, have little effect on the market? When they are the result of bona fide borrow and lend dealings, the rates then obtaining would not be the same as those in the event of a wider use of borrowed capital, indicated but not actually invested, in the case where interest is added to departmental capital.

The greatest difficulty, however, in the matter of including interest as an element of cost seems to us to be that of the tendency of the practice unduly to increase price, for if interest is added as an element of cost and then overhead ranging according to experience (but say 33 1/3% as another item of cost) it means that interest calculated at 6% would thus figure 8% after such addition was made.

This fallacy seems generally understood in practice, as sales managers in quoting prices including these charges have stated that allowances were made to customers repeatedly, under the plea that additions to price on account of interest charges were consistently waived in the event of question of price, on the assumption that they represented "gravy."

As one of the speakers asked at the annual meeting, if interest were

excluded from the balance-sheet statements, might it not properly figure for comparative purposes in the departmental records?

If it be excluded from the balance-sheet as a matter of principle, can it without a violation of principle be included in departmental records?

Of course where interest is actually paid it must show as a deduction from capital share earnings, but on this point we all seem agreed.

Interest seems unquestionably a charge for the use of capital and given the same directive force, in our opinion, it makes no difference so far as its operating force goes whether A or B or A and B or A, B, C, etc., own the capital invested in the oueration.

To sum up: land, labor and capital enter into the production of commodities and it would seem to us that what is taken from each one by use, together with the expense of restoring the portion taken, must be paid by the product.

Labor by special agreement, which should be entirely free and of moral worth, may waive some future for an immediate benefit and take a set wage for its share and may thus be eliminated, leaving the other portion of the product to be divided, let us say, among the owners of the capital represented by the improvements in the land as well as any other investments involved in the production.

As the return or profit is not determinable until the disposition of the production is made, the distribution usually accompanies such disposition unless the investors agree, just as laborers may do, to a different order based on mutual considerations.

It would seem to us, however, that if the manufacture of the product itself is departmentalized and the capital invested in each division duly segregated, the rate of return would be reflected by the income from the product and be absolute. If the capital involved be figured at an arbitrary interest charge surely it would seem to be entitled to the same as income—and the two would "wash."

In conclusion it might not be inappropriate to quote from Clarence Bertrand Thompson's *Scientific Management,* Harvard University Press, 1914, (*Harvard Business Studies*), page 481:

"You may have noticed that interest is not included in this analysis of costs. Raising this question will throw any convention of accountants into debate in a minute. I feel, however, that there is no more reason for including interest in cost than for including profits.

"If you put your money into business instead of loaning it out, your interest becomes profit. If you have to borrow part of the money to carry on your business, the interest that you pay the other fellow is part of the profits that you lose to him. Interest, like profits or dividends on capital stock, is merely a share of the net surplus after all bills are paid. This reasoning applies as well to a factory as it does to a store."

We also quote Garcke and Fells in *Factory Accounts,* published by Crosby Lockwood & Son, London, in 1889, who say *inter alia* on page 74:

"Interest on capital should not, however, in any case form part of the cost of production."

And on page 14 of the same work, speaking of prime cost it is stated:

"In no case should it comprise interest on capital or profit."

(This as we understand it identifies interest immediately with profit.)

It would therefore seem that man and the other forces of nature co-operate in the matter of production, and the charges for the accomplishment of the changes in form necessary to obtain the sought-for production determine the cost of the process of transformation. For the purposes of accounting it seems that terminology defines cost as everything but the return of income on the capital, which is interest or profit if positive, or deficit or loss if negative. The business takes the chance of success or failure. Thus to include interest as cost seems to subvert the whole theory of interest.

Yours truly,
HENRY C. MAGEE.

Olaf A. Mann

We announce with regret the death of Olaf A. Mann, whose article, *Working Capital for Rate-making Purposes,* appears elsewhere in this magazine. Mr. Mann had been a contributor to THE JOURNAL OF ACCOUNTANCY for several years. He had occupied many positions of an accounting nature in the services of large corporations. Mr. Mann wrote many articles on accountancy, and was a lecturer on public utility accounting at the New York university.

Society of Louisiana Certified Public Accountants

At a meeting of the Society of Louisiana Certified Public Accountants, the following officers were elected to serve for the ensuing year:

Geo. A. Treadwell, president; H. J. Jumonville, vice-president; A. J. Derbes, secretary; J. K. Byrne, treasurer.

Elkin Moses was elected as the fifth member of the executive committee.

Geo. A. Savage & Co. and Baker, Birnie & Co. announce that they have formed a partnership under the name of Savage, Baker, Birnie & Co., and will continue the practice of their profession at suite 90-91-92 Commercial Union building, Montreal, Canada.

The partnership heretofore existing between Deloitte, Plender, Griffiths & Co. and James P. McGregor in Chicago was dissolved by effluxion of time September 30, 1918. Mr. McGregor announces that he has been admitted a partner in the firm of Arthur Young & Co.

J. D. Cloud & Co. announce the removal of their offices from First National Bank building to 805 Traction building, Cincinnati, Ohio.

The Journal of Accountancy

Official Organ of the American Institute of Accountants

Vol. 26 DECEMBER, 1918 No. 6

American Institute of Accountants

BOARD OF EXAMINERS

November, 1918, Examinations

Auditing

NOVEMBER 18, 1918, 9 A. M. TO 1 P. M.

Answer ten of the following twelve questions and no more:

1. How would you proceed to audit the books and accounts of the treasurer of a local Red Cross chapter? What evidence would you require as to the propriety of disbursements, and how would you ascertain that all receipts were duly recorded?
2. Draw up an outline of a report on your audit of the accounts of a corporation that has recently erected a large apartment house. Assume your instructions covered the period of erection and at least one year of operation.
3. A corporation has issued $1,000,000 of 6 per cent 20-year bonds at 90 and for 8 years has written off 5 per cent of the discount each year. Last year an opportunity occurred to buy in $200,000 at 85, which was done and the bonds cancelled. The directors propose to take up into their year's revenue $30,000, the discount saved upon extinction of this liability. Do you approve? If not, what course would you advise, or, if they insist, how would you act?
4. "Inventory of merchandise should be carried at cost or market, whichever is lower." Do you assent to this proposition? Can you suggest circumstances in which you would approve a departure therefrom? Would

you be influenced by events or conditions subsequent to the date of closing the accounts? Give reasons.

5. Assume you are to audit periodically the accounts of the trustees of a decedent's estate, holding a large number of investments, and frequently adding thereto. Outline a plan for your own guidance to detect the failure to collect or record the income from such investments. What would be your attitude regarding accrued interest or dividends in closing the accounts periodically?

6. Give some general principles which will guide you in determining whether too much or too little provision has been made for depreciation of buildings, machinery, tools, goodwill, patents, franchises. Would a flat rate cover all these assets satisfactorily?

7. On pointing out the insufficiency of the provision for depreciation on machinery, which the directors admit, you are met with the argument, supported by evidence, that the real estate values have appreciated to an even greater extent than the entire depreciation of other assets. As this latter is not taken up on the books you are asked to allow the one to offset the other. Give reasons for your agreement or disagreement.

8. A financial institution has a large amount of capital invested in mortgages which are constantly changing. Suggest a plan for confirming by averages, and without a complete detailed examination of every account, the amount of income on this investment taken into profit and loss account for a year under examination.

9. State how you would satisfy yourself that all outstanding liabilities of a business are properly taken up in the balance-sheet. Point out what you would like to find by way of system that would simplify this task. How would you indicate on the balance-sheet as of December 31st:
   - (a) Preferred dividend (cumulative) due the previous November 1st not declared.
   - (b) Ordinary dividend for the year, declared the following January 22nd.
   - (c) Ordinary dividend declared December 30th, payable February 1st?

10. Your verification of the securities of a corporation has to be made at a date about two months subsequent to the date of the balance-sheet you are asked to certify. Can you suggest steps which will enable you to do this without risk of overlooking serious overstatement?

11. In auditing the books of a club with a restaurant, bar and cigar-stand you are not satisfied that supplies are properly accounted for, although an inventory is supposed to be taken every month. How would you set about verifying your suspicions regarding the more expensive commodities (wine, liquors and cigars)?

12. Indicate what would guide you in examining and criticizing accounts receivable carried on the branch office books of a business. What would you require before
    (a) accepting the debts as good or
    (b) writing off those you were told were bad?

Commercial Law

NOVEMBER 18, 1918, 2 P. M. TO 5.30 P. M.

Give your reasons for all answers.

Negotiable Instruments.

Answer three only of the following five questions:

1. A note non-negotiable in form is executed and delivered by A to B and endorsed by B to C. A refuses to pay it when due, claiming want of consideration. C brings suit against A, averring that he was a holder in due course. Can A successfully defend the action if want of consideration is established? Give reasons.

2. Suppose that the above note had been negotiable, would A's defense of want of consideration be a bar to C's recovery or not? Give reasons and state the rule applicable to the principle involved in this and the foregoing question.

3. Define a negotiable bill of exchange.

4. State three cases in which the alteration of an executed and delivered note becomes material.

5. A negotiable note executed and delivered by A to B passes in due course to and is endorsed in blank by B, C, D and E; F is the last holder and strikes out C's endorsement. What is the liability of C, D and E on their endorsement?

Contracts.

Answer three only of the following five questions:

1. What is the right of stoppage in transitu of goods, wares and merchandise by the seller.
2. Define consideration in the law of contracts and distinguish between a good and a valuable consideration.
3. When can an offer to perform a contract be withdrawn?
4. What are "goods, wares and merchandise" within the meaning of the statute of frauds?
5. (a) Define mistake and give its effect on contracts.
   (b) Define misrepresentation and state its effect.

Corporations.

Answer two only of the following four questions:

1. Name some powers impliedly conferred on every corporation.
2. Name some powers which will not be implied.
3. Has a stockholder a right to examine the books of a corporation? If so, for what purpose?
4. What right has a stockholder to a share of the profits of a corporate business?

Partnership.

Answer one only of the following two questions:

1. Can one partner transfer his interest to a stranger without consent of his co-partners?
2. Describe general, special, ostensible, secret and silent partners.

Federal Taxes.

Answer both the following questions:

1. Are domestic partnerships obliged to make income tax returns?
2. Is the income of interest on Liberty bond issues taxable under the law in force July 1, 1918? If so, to what extent?

Accounting Theory and Practice

Part I

NOVEMBER 19, 1918, 9 A. M. TO 1 P. M.

Answer all the following questions:

1. The following items appear on the balance-sheet of the American Pin Company, June 30, 1912: land, buildings, equipment, etc., $335,000; capital stock of the Bronx Pin Ticket Company, par $50,000; cost, $57,400; patents, $15,000; working and trading assets, $37,500; cash, $10,000; accounts receivable, $32,000; due from Bronx Pin Ticket Company, $375.82; deferred assets, $1,500; first mortgage 6% gold bonds payable, due 1922, $100,000; taxes accrued, $3,250; salaries and wages accrued, $4,327.82; accounts payable, $123,749.83; notes payable and interest, $80,125; interest accrued on first mortgage bonds payable, $2,500; reserve for depreciation of building and equipment, $35,000; preferred capital stock outstanding, $75,000; common capital stock outstanding, $50,000; profit and loss surplus, $14,823.17.

The American Pin Company having acquired all the capital stock of the Bronx Pin Ticket Company, the balance-sheet of which appears below, it is proposed to merge the two companies as of July 1, 1912.

THE BRONX PIN TICKET COMPANY

Assets—Land, buildings and equipment, etc., $260,000; capital stock of the Blauser Pin Tray Company carried at par, $35,000; patents, $22,625; working and trading assets, $10,000; cash, $10,365.27; accounts receivable, $37,943.86; sinking fund, $3,236.92; deferred charges to expense, $1,200. Liabilities and capital—First mortgage 5% gold bonds payable, due 1925, $50,000; taxes accrued, $2,750; salaries and wages accrued, $3,147.83; due to creditors, $144,720.30; due to American Pin Company, $375.82; notes payable and interest, $31,372.53; interest accrued on first mortgage bonds payable, $1,250; reserve for depreciation of plant and equipment, $27,500; common capital stock outstanding, $50,000; profit and loss surplus, $69,254.57.

Prepare:

(a) The entries on the books of the American Pin Company.
(b) The entries on the books of the Bronx Pin Ticket Company.
(c) Balance-sheet of the American Pin Company after the merger.

2. The following problem is based upon the estimate cost system. No factory ledger will be used, all accounts being kept on the general ledger. The business is the making of men's clothes, and two principal materials will be used, fine woolens and plain woolens, of which stock records will be kept. Stock record will also be kept for finished goods.

(a) The following styles of clothing will be made, and they are estimated to cost:

	Style 801	Style 802	Style 803
Materials used	$12.50	$8.00	$4.00
Supplies (linings, buttons, etc.)	3.00	2.50	2.00
Labor	9.00	6.00	4.50
Factory expenses, 60%	5.40	3.60	2.70
	$29.90	$20.10	$13.20

Note that the estimated costs are subdivided into four sections and that the accounts must be kept to record the corresponding subdivisions of operating costs.

(b) The company starts with the following:

	Dr.	Cr.
Machinery and equipment	$10,000.00	
Cash	40,000.00	
Capital stock		$50,000.00

(c) The purchases for the first month according to voucher record are:

Materials, fine woolens, 2,000 yds., at $3.00	$6,000.00
Materials, plain woolens, 3,000 yds., at $1.50	4,500.00
Rent of factory	500.00
Lining, buttons and thread, etc	3,400.00
Salesmen's commissions paid	700.00
Office expenses	120.00
Repairs to machines and equipment	350.00
Electric power	440.00
Oil, waste and other factory supplies	225.00
	$16,235.00

(d) The payrolls are summarized as follows:

Foreman and timekeepers....................	$250.00
Tailors, cutters, etc. (direct labor)............	4,600.00
Office and salesmen's salaries.................	750.00
Inspectors and other indirect factory wages...	435.00
	$6,035.00

(e) Depreciation on equipment is calculated at 1% per month.

(f) The cutting room foreman reports having taken from stock and cut the following materials for use on garments in progress:

1,400 yds. fine woolens
2,200 yds. plain woolens

(g) The tailoring foreman reports the following garments finished and placed in stock:

Style No. 801..............200 pieces
" " 802..............300 "
" " 803..............200 "

(h) The sales record is as follows:

Invoice	No.	1	Style	No.	801	100	pieces.	$4,000.00
			"	"	803	100	"	2,000.00
"	"	2	"	"	801	50	"	2,050.00
"	"	3	"	"	802	100	"	3,000.00
"	"	4	"	"	802	100	"	2,800.00
			"	"	803	25	"	450.00
								$14,300.00

(i) Hint: make entry for cost of sales.

(j) Received cash from customers, $9,000.00.

(k) Paid out cash for wages, $6,035.00, and vouchers, $7,650.00.

(l) Inventories at end of month. (In addition to stocks of raw materials and finished goods as shown by stock records.)

Supplies, $1,000.00
Unfinished goods:
Style No. 801, 50 pieces.

All material cut.
All supplies provided.
Labor half completed.

Style No. 802, 100 pieces.
All material cut.
Half of supplies provided.
Half of labor finished.

(m) Prepare balance-sheet and profit and loss account for the month. Add or deduct from cost of sales, when preparing profit and loss account, the unabsorbed labor, expenses, etc.

(n) Show how balances of raw material and finished goods are made up.

3. A dealer in foreign exchange finds from his books that he has had the following transactions in London exchange during a particular month, viz.:

Exchange bought in local market:
Jan. 1 30-day bill, payable in London £300 at 4.75
Jan. 15 Bill due at sight in London £2,500 at 4.76
Exchange sold in local market:
Jan. 5 Bill due in London at sight £1,000 at 4.77
Jan. 20 Cable transfer £2,000 at 4.78
Foreign correspondents' draft honored and paid:
Jan. 20 Bill at 30 days after sight accepted Dec. 21st £500 at 4.78

State how the balance on the account stands at the close of the month, and how much profit or loss has been derived from the transactions. (At Jan. 31st the rate for cable transfers is 4.80.) Is the profit or loss so stated final?

4. A distinction is made between funded debt and unfunded debt. Please define and compare, discussing the advantages and disadvantages, if any, attaching to each.

Accounting Theory and Practice
Part II

NOVEMBER 19, 1918, 2 P. M. TO 6 P. M.

Answer any eight of questions 1 to 11 and any four of questions 12 to 18 and no more:

1. Mention and explain two common views concerning the treatment of donated capital stock.

2. What is the status of a company in the hands of the alien property custodian with regard to the capital stock tax as required by the revenue act of September 8, 1916?

3. A manufacturing concern having several branch offices for the sale of its product is in the habit of billing the branches at a wholesale price and expects each branch to show a profit. A balance-sheet is prepared in which the current accounts with the branches (after closing out their profits and losses into head office) are carried as accounts receivable. These branches carry a considerable stock of merchandise and have their own accounts receivable and possibly some outstanding accounts payable. How would the above balance-sheet have to be modified in order to show correctly the financial condition of the business?

4. (a) What items do you consider should be charged or credited direct to surplus?
   (b) Would you regularly make small adjustments of subsequently discovered errors through this account?
   (c) Is the balance at credit of surplus ever in any circumstances a liability, and, if so, to whom?

5. Give some idea of what taxes you would charge against income and what against surplus. Of the former, which, if any, would you take up into manufacturing costs? What provision, if any, would you make for income and excess profits taxes in closing accounts before the passing of a pending act levying these taxes, either in general circumstances or when profits are partly divisible under some special contract or arrangement?

6. Give some principles to determine a proper disposition of the cost of enlarging a plant, including a partial re-building of the old portion.

   In case you have insufficient data to enable you to apply these principles satisfactorily, offer some solution of the difficulty.

7. What are the distinguishing characteristics of the "corporation" as compared with other forms of business organization? What privileges does it carry and what, if any, are its disadvantages?

8. There is a confusion in the minds of many people between statements of "revenue and expense" on the one hand and of "receipts and payments" on the other hand. Dis-

cuss the distinctive features of such statements showing wherein they differ.

9. Can you suggest any circumstances in which goodwill would appear in the books of a partnership?
10. A company makes machines of a highly technical nature which it rents out, but refuses to sell, to its customers. These machines, if kept in good order, are calculated to last almost indefinitely, but say for at least 20 years. They are, on the other hand, liable to be superseded at any time by new devices or methods. How would you treat the original capital value on the books of the company? (Assume that two years' rental would, in each case, liquidate the first cost.)
11. What are the present requirements of the federal reserve banks in regard to the verification of the accounts of companies whose paper is submitted by member banks for rediscount?
12. Enumerate the essential heads of information which ought to be brought out in statements prepared for the information of bankers for credit purposes. Would you or would you not amplify such information in a statement prepared for the information of
    (a) Officers and directors,
    (b) Shareholders of a company?
13. On December 31st the office of a company with which you have previously been connected as auditor is burned and all its records completely destroyed. Its plant is, however, saved, and its business can be continued without any break. You are called upon to assist in the preparation of a balance-sheet and open up new books without delay. How would you proceed? You have in your possession a balance-sheet prepared by yourself at the close of the preceding year. You will incidentally also be required to prepare the company's returns for income tax purposes.
14. Define corpus and income and state clearly what they mean in dealing with the accounts of a decedent's estate. Outline the books you would keep in order properly to record transactions affecting such an estate, it being assumed that the will calls for the division of the estate into a number

of trusts, some of which carry life rent
ficiaries with a different application ı
principal.

15. State the rules which govern the treasury
under law or under its official rulings
the deduction of any four out of the follo
of deductions from gross income in prep
of net revenue:

(1) Bad debts and reserves for them;
(2) Depreciation of horses;
(3) Depletion of coal in a coal mining com
(4) Depletion of oil in an oil producing con
(5) Donations and charity;
(6) Salaries of officers of a corporation;
(7) Excess profits tax in its relation to in
versa.

16. Give a pro forma monthly operating an
statement for any one of the following
ducing a statistical statement showing u
other useful cost data which may be practi

(a) A brewery;
(b) A flour mill;
(c) A coal mine;
(d) An oil development company with pro
(e) A foundry;
(f) A rolling mill producing steel rails.

ACTUARIAL QUESTIONS (OPTI

17. A corporation wants to retire a debt of $
5% interest payable annually. The tenth
ing interest, is to be $15,000. The other
payments are all to include interest and to
amount. Required the amount of each of
ments ($1.05^9 = 1.551328$).

18. A $10,000 five per cent semi-annual coupon
on a 4 per cent basis due 1½ years henc
cost?

Carrying on with the Accountants in the American Expeditionary Forces*

By C. B. Holloway

In my previous article† I promised to submit later a description of some of the more specific operations carried on by the accounting personnel of the American Expeditionary Forces. It so happens that the bureau of accounts has recently made reports to Mr. E. R. Stettinius, assistant secretary of war, and to the inspector general, American Expeditionary Forces, S. O. S., summarizing the operations of the bureau to date, and outlining the proposed development of accounting and finance operations in the American Expeditionary Forces in the future. A brief description of the subjects covered in these reports will perhaps convey a bird's-eye view of the magnitude and scope of the accounting and finance operations which the accountants of the American Expeditionary Forces are engaged in handling.

The report to the inspector general brought out the fact that during the period of five and one-half months of the life of the bureau of accounts, the following ground had been covered by an average force for the period consisting of one major (officer in charge), 2½ captains, 1¼ first lieutenants, 3⅔ second lieutenants, 9 enlisted men and 4½ civilian clerks and girls:

(a) Standardization of forms and instructions for receipts, bills, financial channels, etc., in dealings of the American Expeditionary Forces with the French, British, Italian and Belgian governments for supplies and services furnished by and to the American Expeditionary Forces.

(b) Study, development and recommendations on accounting problems and outstanding obligations, etc., of the American Expeditionary Forces.

(c) Compilation of consolidated records and statistics on American Expeditionary Forces disbursements, contracts placed, etc.,—status of bills rendered by the French and British governments—and preliminary investigations of obligations assumed by the American Expeditionary Forces and not yet billed.

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*Passed by censor.

†See The Journal of Accountancy, October, 1918.

(d) Office administration, which includes in addition to mail and records, files personnel, etc., a section of laws, appropriations, regulations, etc., and training. This latter section is a rather interesting development of the bureau of accounts and is being operated by one sergeant, two enlisted men and a girl member of the Q. M. A. A. C. borrowed from the British government., All orders, circulars and bulletins of the American Expeditionary Forces are promptly indexed here so that any question as to existing regulations covering American Expeditionary Forces operations can immediately be turned up for reference. The same procedure is followed up for each appropriation act and special digests are made of all laws, appropriations, orders, etc., bearing on accounting and financial matters of the American Exeditionary Forces. Organization charts for the entire American Expeditionary Forces and special charts having to do with finance and accounts are available for guidance. In addition the more important reports of operations and recommendations made by the bureau of accounts are assembled in sequence digests. In this manner, arriving personnel even though unfamiliar with army organization or accounting, can be rapidly trained and made available for constructive work.

In the latter part of September a set of reports was made to Mr. E. R. Stettinius, assistant secretary of war. Copies of these reports were furnished to the secretary of war, Mr. Baker; to commanding general S. O. S., American Expeditionary Forces; to the representative of the treasury department in France and to the war department, Washington. These reports covered the following:

a. Recommendations and plan for developing and working out accounting and finance operations of the American Expeditionary Forces.

b. Report on existing American Expeditionary Forces departmental accounting methods.

c. Statement of total approximate disbursements by American Expeditionary Forces departments to July 31, 1918.

d. Summary of above disbursements classified between foreign governments, commercial concerns, pay of the army, etc.

e. Summary of above by appropriation headings.

f. Summary of total transactions and current status of bills rendered by the French government.

g. Test classifications for one month by individual items of supplies paid for.

h. Memorandum on important and unusual operations of the American Expeditionary Forces requiring special investigations and adjustment in regard to accounting.

This report also included recommendations as to the method of arriving at estimates of future financial requirements in relation to military and supply programmes and availability of materials and supplies for purchase in Europe. Sundry other matters were incorporated into this report, but the above will indicate the enormity of accounting and finance operations over here with which the bureau is attempting to cope in a central control capacity.

Mr. Alexander S. Banks, certified public accountant and member of the American Institute of Accountants, came to France with Mr. Stettinius as accounting representative on his staff, and rendered a separate report in connection with his duties. It was a pleasure to co-operate with him as he readily grasped the magnitude of operations over here and the difficulties encountered. We had some very interesting personal experiences including a trip to the French and American fronts in connection with accounting for supply and sector transactions with the combatant troops. This trip took us through many historical spots including the Chateau Thierry district which had just been recovered from the Huns; Rheims, which was still under fire; Verdun, a ghostlike shell of former historical activity; the grave of Quentin Roosevelt on the sunny side of a sloping hill; the reputed base of one of the big guns which shelled Paris (abandoned by the Germans but not yet dismantled) and innumerable wrecked villages, chateaux, etc., many of whicn were former German headquarters.

Our automobile was chased down the deserted streets of Rheims by a Boche plane for a few startling moments; and in another sector near the front in pitch black darkness near the cross-roads another Boche plane dropped its flares and then nonchalantly sprinkled bombs around us. The sights we saw and the tales we heard will stand out always in our memories. Mr. Banks filled an empty wine bottle from the waters of the Marne, in the heart of the former district which was so gallantly saved by the American marines, and brought it back with him to Paris. He placed a label upon the bottle as follows: "Water taken from the

Marne by A. S. Banks" on a certain date. Some wag on the staff of Mr. Stettinius wrote underneath "This is the only water taken by Mr. Banks in France." History does not record Mr. Banks' personal comments upon this addendum.

Returning to the less adventuresome and romantic phases of the bureau of accounts activities, Captain Raymond Ives, financial requisition officer, and I wish to express our appreciation of the coöperation which the American Institute of Accountants and its individual members have furnished in connection with the selection of accounting personnel for our purposes over here.

Mr. C. S. Ludlam of Haskins & Sells is expected to arrive shortly with a force of 25 commissioned accountants and 30 enlisted accountants selected for the bureau in the United States. Mr. Ludlam is expected to assume very important duties and with the other accountants will be a welcome addition to the force over here. All of them will soon be rendering valuable service to the army.

Since sending the previous article, the public accountants have been gaining further recognition in the American Expeditionary Forces and several of them who were commissioned as a result of cables to the United States have already been released by me upon special request for important duties elsewhere. Captain Wm. Whitfield, of Whitfield, Whitcomb & Co., has just been made financial requisition officer for England. Captain E. B. Wade has been released to act as officer in charge of the administration finance and accounts division of the engineers department. Lieutenant A. J. Stevenson has been sent to Italy to assist in developing accounting operations there. The statistical bureau of the general purchasing board has been placed under the supervision of the bureau of accounts and Captain J. J. Newman, formerly with Lybrand, Ross Bros. & Montgomery, has been placed in charge for the purpose of developing the operations of this bureau. Captain C. R. Stanley who came over as one of my original assistants in the engineer department, has been transferred therefrom to act as one of the chief assistants on the bureau of accounts.

I am leaving for England tomorrow to make a study of accounting problems there, and it has been arranged for me to make the trip from Paris to London by aeroplane, which will be a rare experience. It will only be a short time before representa-

tives of the bureau will also be operating in Italy, Switzerland and Spain.

Mr. Isaac Marcosson who has been writing for the *Saturday Evening Post* and is now preparing a series of articles on the *Business of the War in the American Expeditionary Forces* recently visited the bureau and will include its operations in his series of articles which should appear in the *Saturday Evening Post* before many months. He seemed interested in this phase of army operations and in the work which public accountants are doing over here and has described the bureau by the catch phrase *"Factory of Accounts of the American Expeditionary Forces."*

The strain over here is beginning to tell on those of us who have been the pioneers in the work and have been at it from the beginning without let-up or leave, and we are counting upon Mr. Ludlam's specially selected accountants (who are due to arrive soon) to "carry on" and permit us to relax before the efficient and relentless "medica" send us to the hospital or recuperation camp, which I, for one, have been narrowly dodging for a number of weeks.

We wish to thank the various accountants who have written us from time to time and whose letters we have been unable to answer on account of the press of work. Whether or not there is an armistice with the Germans there will not be an armistice with the accounting and financial problems of the American Expeditionary Forces for some time to come, and when it is all over the accountants will have helped to make history both during the war and in the period of settlement which will follow.

Verification of Inventories*

By A. L. Philbrick

The specialized feature of accounting known as auditing has developed in recent years to an extent far beyond the expectations of accountants of twenty or thirty years ago. At the present time auditors are depended upon by all classes of business men who desire the opinion of a disinterested third person in regard to the history or standing of a business or company. This history tells by what means a business enterprise has arrived at its present condition and proves or disproves the statements of the officers as to the assets the company or firm possesses and the liabilities which it has assumed. Men who desire to purchase a business already established no longer depend upon their own judgment as to the condition of the firm which they are about to purchase even though they may be men of years of experience in that branch of trade or manufacture in which they desire to engage. They realize the impossibility of depending upon the accuracy of their own judgment and their own specialized knowledge of the conduct of details of the business. When they wish to know the values that at present constitute the property which they wish to buy, they look to the auditor to investigate for them and report to them on every feature of the business and particularly upon the volume of its present assets and the extent of its present liabilities.

The banker to whom the business man applies for a loan of funds with which to conduct his business is now avoiding the long-established banking custom of depending solely upon the character of the man who applies for the loan. There have been so many unfortunate results from this old banking practice that the banker now asks the auditor to investigate for him in regard to the assets and liabilities involved in applications for loans.

An executive committee of a corporation, which is so large that no group of men can visualize its entire activities and give proper weight to details, realizes the hopelessness of attempting to inaugurate a new policy in regard to the affairs of the company, whether that policy be one of expansion or retrenchment, without

* A thesis presented at the May, 1918, examinations of the American Institute of Accountants.

at first ascertaining from this disinterested third person, an auditor, the exact situation. The auditor is called upon to supply this information and upon the facts which he reports the future conduct of the business is determined.

These are but a few of the many different purposes for which an auditor is engaged. Many thousands of dollars are invested or are withdrawn from investment as a result of his findings. Hundreds of skilled and unskilled workers are given employment or discharged from employment on the basis of his opinions. Bankers lend or refuse to lend; stockholders invest or refuse to invest; bond holders and prospective bond holders are led to purchase bonds or are led not to purchase them as a result of the published facts which he ascertains. In general, his responsibilities involve the fortunes of thousands of people, and the extent of his responsibilities is usually appreciated by him to the full degree.

In the course of scores of years of the practice of accounting in Scotland, England and the United States, the accountant has established the custom of communicating opinions reached as a result of audits by means of one of three or a combination of three different written instruments. The occasion often arises whereby the accountant is called upon to supply a list of the assets or liabilities of a company or firm as at a certain date. Again, the accountant is called upon to supply a statement of the profits that have been made during a certain period or a certain number of periods. Almost always one of the three above-described statements is prepared by the auditor, and usually all of them. The first is called a balance-sheet, the second a profit and loss account, or statement of profit and loss, and the third is usually called the report.

Many times a business man does not understand the significance of the facts that are presented on the balance-sheet or profit and loss account. Through lack of practice he often is unable to compare one item with another and by means of this comparison arrive at a correct estimate of the present condition of the company or of the prospects for its future success. Auditors have attempted to aid him to understand these figures by writing a report which generally describes the method that the auditors used in preparing the two main statements mentioned above. In

addition the auditor usually makes certain comments which illuminate to a very great extent certain portions of these two statements that have previously remained in shadow as a result of a business man's inexperience in the interpretation of similar statements. The figures as given are the work of the auditor or accountant himself. He is responsible for their accuracy, and he is obliged to present them in such a way that his client or those who may see them cannot possibly misunderstand them. It is not enough that his statement can be understood. It must be so clear and plain that it cannot possibly be misunderstood.

This, briefly stated, is the work that the auditor is called upon to do and these are the responsibilities that he assumes. But there always is involved in his work such an equation of human judgment that the question often arises as to how far his responsibility goes, considering that he is human and that he is dealing with human beings. He is not inclined to enlarge upon the limits of his responsibilities in this respect, and he is not inclined to advance the legal excuse, on which he may technically rely, of having used due care and diligence. The extent of his responsibilities is measured by the standards which he sets for his own work, and in recent years the weight of professional opinion has resulted in his assumption of far greater and far heavier responsibilities than the auditors of two decades ago considered within the bounds of reason.

The three main statements, then, the balance-sheet, profit and loss account and the comments, reflecting as they do the static condition of the business on a certain day and the progress of the business over a certain length of time, contain everything for which he is responsible. If there is a weakness in fact in any one of these statements his work is discredited.

Strangely enough, there is one common item that appears in each of these two statements, and this common feature offers more chances for error than almost any other item that appears. This item is the key-stone of the entire structure of his work. If it is not accurate—if it is not sound in every respect—the auditor is lost. No amount of painstaking work or exacting care taken with other parts of his reports can counteract the effect of error here. To add to his difficulties, this one item offers lures such as are not to be found anywhere else.

This one item is the figure which shows the value of the raw materials and completed stock on hand and is commonly called the inventory.

Before going into the difficulties involving the verification of the inventory, it may be well to explain just why this figure is of such vital consequence. As stated before, it appears in two places, on the balance-sheet and in the profit and loss account. In the balance-sheet it appears among the current assets, one of the two most important parts of the balance-sheet. The excess of current assets over current liabilities is generally called the working capital of the company. The working capital is the first line of defence of a commercial enterprise. A strong position reflected by the working capital indicates the present power of the company. The ability of the company to withstand extended periods of depression depends at first upon its resources in the shape of working capital, and secondly upon its resources in the form of fixed capital. The inventory usually forms a large part of all the current assets. If the inventory be overstated the current assets are overstated, the working capital is overstated and the company is made to appear in a much better financial condition than that in which it really is. A scheme of expansion based upon this overstated working capital may plunge the company into a receivership, or it may encourage a laxness in enterprise which may have a disastrous effect.

This inventory figure that is used in the balance-sheet among the current assets must also be used in the profit and loss account to determine the extent of the profits. If the inventory be overstated, the profits are overstated, indicating that the return the company has made on its invested capital for the year is unduly large. As a result the expectations of stockholders, bankers and, in general, the investing public are raised to a point higher than conditions warrant. If the inventory be understated, the current assets are understated and the profits are also understated; and plans for expansion which might well be undertaken are abandoned, and capital which might be rendering a good return is unnecessarily frightened away.

An error in the inventory at the beginning of the year is reflected in the statement at the end of that year, for the same figure is used in the profit and loss account at the end of the year as was used at the beginning. The vitally important posi-

tion, therefore, that the inventory occupies in the statement prepared by an auditor can readily be understood. If the auditor could be absolutely sure that the figure he has obtained is correct, he would avoid one of the most interesting problems in practice and in ethics that is presented to the members of any profession.

An understanding of the auditor's difficulties in respect to the inventory may be shown by describing some of the conditions under which this work is done.

In the first place the inventory is usually presented by the company itself, which is vitally interested in a clean bill of health from the auditor. The company officers or employees count the goods, weigh them or measure them, company officers or employees put the prices on these goods, raw materials and finished product, and company officers and employees usually perform the clerical work of placing the values in the money column, by multiplying the quantity by the price. After their work is done the auditor is called upon to verify it, and generally his work consists of proving:

(a) That the goods listed were on hand at the date when the inventory was taken;

(b) That the goods and the material listed were in marketable condition at the date of the inventory;

(c) That the materials were all raw materials, work in process, or completed goods such as a company would naturally have on hand, and that there is nothing listed that cannot be so described;

(d) That the goods listed were not pledged as security for loans still outstanding;

(e) That all the goods that were in the company's possession were the property of the company—that is, they were not goods held on consignment from outside firms;

(f) That liabilities have been set up for all the goods that have not been paid for;

(g) That the prices used were the current market prices at that date or were actual cost prices, providing the cost prices were lower than the market prices at the date of auditing;

(h) That all the extensions, footings and summaries and all other features of the clerical work are correct.

The above catalogue of things that must be proven by the auditor in respect to an inventory comprises only those that have to be proven in regard to each inventory that the auditor

examines. There are other difficulties that present themselves in special cases, so that the task that the auditor has of the presentation of a correct inventory figure, whatever may be the unusual conditions surrounding his work, or involved in the preparation of the inventory itself, is never easy. If the auditor has become involved in an error in the inventory, he can present any number of extenuating circumstances that would hold in the courts of law, but evidence which might readily be allowed by law in regard to a great many features of business life cannot be conscientiously presented by any professional man whose standards are ideals and not statutes.

With this standard in mind I should like to discuss now the responsibility that the auditor assumes in regard to inventories as they relate to the items that have been presented above.

In the first place, the condition must be accepted that inventories are prepared by those who are most vitally interested in presentation of a high financial standing of the company. The auditor very seldom encounters a deliberate falsification of an inventory, but he does often encounter that optimistic state of mind on the part of company officers which results in the presentation of such financial results as the company officers desire should exist. Their personal interests are so heavily involved that, no matter how judicial they may attempt to be, there is usually presented the most favorable value of the company's goods and material on hand. On the other hand, there are occasions when the personal interests of those who have the preparation of the inventory in charge are best served by an undervaluation of the inventory, which is as grave a departure from the truth as an overvaluation. This, in itself, puts the auditor on his guard, and he goes over all items realizing that each one may be more favorably presented than if an impartial person or number of persons had been responsible for the figures.

The fact that the goods were on hand at the date when the inventory was taken must be proven by the auditor, and when we say "on hand," we mean in the possession of the company at such a place and under such conditions that they are under absolute control of the company. These goods may be in the warehouse of the company or they may be in the warehouse of another company from which they were purchased or they may be in the hands of a common carrier. If it can be proven that they were

in the warehouse of the company at the date of inventory, there is a strong presumption in favor of the belief that they were actually the property of the company at that date. But the auditor is not justified in assuming without question that they were the property of the company. He must have an additional proof of their ownership. They may have been moved in one day and moved out another; and by tracing invoices of purchase, way bills, express receipts, dray tickets and other documents that currently pass in the regular course of business, the fact of their ownership may be more clearly established. This question of ownership is the question of prime importance which must be settled before any other verification, such as prices and condition of goods, can be of value. Not until the auditor has exhausted every measure to make this proof absolute to his own satisfaction (and his standards in this respect must be of the very highest) can he conscientiously assume that the goods were the property of the company whose books he is auditing.

He must also satisfy himself that the raw materials are in such a condition that they can be converted into finished product which the company can sell, and the finished product that is on hand must also be in marketable condition. This question involves the use of rare judgment on the part of the auditor and involves a knowledge of the market in which these goods are to be sold. In our country, where the manufacture and sale of luxuries constitute such a large proportion of the business done, there is a chance of serious error in this respect.

For example, styles affect values in a very large number of commodities which are sold. This fact is no better illustrated than in articles of women's wear, where the styles constitute anywhere from 70% to 90% of the values of the goods. Forms for women's hats may be worth $2.00 apiece when the style is up-to-date, and a few months later be sold for 10c apiece because the style has changed. The quality of the material has not changed, the form on which it was manufactured has not changed, but the demand for that form has changed completely. The same condition exists in the case of women's shoes, the cloth and texture of cloth for men's and women's clothing. And when jewelry is considered there is sometimes nothing left but the intrinsic value of the gold or silver which is used in the manufacture.

Conditions in the old methods of manufacture of almost everything will result in complete changes on account of an invention of a new machine, a newly discovered use for an acid or a new method for firing a boiler. If the goods are not in marketable condition, the prices should be reduced to the lowest possible figure; and often these prices have to be reduced to the value of the raw materials that are in the manufactured product simply because the manufactured product is no longer salable. The reason for this reduction in inventory price is seldom seen by manufacturers. Their argument usually is to the effect that the goods cost them a certain price to make and, therefore, that price should be the inventory price because it is the cost price and that the goods are worth as much now to them as when they were made although they realize that they could not obtain that price in the open market.

Oftentimes there is included in the inventory raw material or work in process or completed goods which the company does not have on hand in the regular course of business. All these articles should be excluded and placed in another classification amongst the current assets. The inclusion of deferred charges to profit and loss in inventories is very common, as is also the inclusion of bonds or mortgages held, as well as personal loans, which may not have even a note receivable to indicate their existence. If these assets are allowed to remain in the inventory, even though they may be worth all the value that is given to them, the inventory at the end of the year may not include them because during the course of the year they may have been sold. Such sales are seldom recorded as part of the balance of the company and, of course, they should not be recorded, but when they are included in one inventory and left out of another, the inventory as presented is not correctly stated. Expenses for the defense of patent suits and the costs of experimentation in new processes, no matter what the condition may be under which they are listed by the company itself, should never be allowed to appear in the inventory that the auditor places before the company's stockholders and the investing public. In the balance-sheet which he finally approves, the auditor's responsibilities in this respect are, in my opinion, almost without limit.

The auditor should also be sure that none of the goods listed on the inventory has been pledged as a security for a mortgage.

This fact can be established sometimes by an investigation of all the cash receipts. But there is one feature of an inventory of which there is no absolute proof. A dishonest merchant or manufacturer can pledge all his inventory or all that the banks are willing to accept in the form of pledges and there may be nothing to indicate such a pledge on the books. The cash that has been received as a result of pledging these goods may be credited to the personal account of the proprietor himself, and he may state that it represents advances out of his own personal funds. He may not even enter the cash so received on the books of the company but use this cash in the payment of bills which have never been entered as liabilities and all records of which he has been very careful to destroy.

The accountant may take certain measures to discover liabilities in the form of pledges of raw material or completed products, such as correspondence with the known creditors of the company or with those bankers with whom the merchant or manufacturer may have had dealings during the course of the year. But all the precautions of this nature that he may take may not disclose the fact that the goods are not free from any lien or mortgage. He may use other methods that suggest themselves as a result of conditions that he finds surrounding the business of the company disclosed in other features of the audit. But he never can be absolutely sure that the goods are free and clear of financial incumbrances. He should always obtain a certificate from a responsible officer or the owner of the business to the effect that the goods are not pledged as a security for a loan, but if the merchant is inclined to falsify his inventory he would almost as freely sign a false certificate. There is little satisfaction for the auditor in having documentary proof that his client is corrupt and untrustworthy if those who depend upon his balance-sheet for a financial statement suffer a financial loss. One of the purposes for which the auditor is engaged is to prove the value to the business of the assets that it has, and when the crash comes the auditor is not in a good position if he attempts to defend himself by stating that his client lied to him.

That is the ethical side of this situation, and the creditors of the company are likely to believe that the auditor lacks ability if he permits himself to be deceived in this manner. However, if the creditor attempts to collect from the auditor the amount lost

as a result of trusting in the balance-sheet, the auditor has the legal defense of showing that he used due care and diligence; but, as was stated before, that is the very last defense which an auditor wishes to present.

An error which may occur as often as any other is that of considering goods that are on hand but are held on consignment as the property of the company. Legally these goods are not the property of the company, although there is no way of distinguishing by their appearance that they are anything but live current assets. The auditor may encounter in the income of the company commissions that have been earned on goods sold, and such commissions are an indication of business being conducted on the consignment basis. The auditor is then put on his guard and should see invoices for as much of the goods on hand as can be possibly traced. The tracing of certain goods that are on the inventory by means of invoices is always difficult and many times impossible.

Again the auditor may have to rely upon the certificate of the proprietor of the business, or he may be able to see that the total quantity of goods on hand is very large as compared with the volume of sales. There is no limit to the volume of goods that a consignee is willing to carry, because he does not have to pay interest on the money invested in them, so that his inventory may be relatively inflated with that class of goods and no indication be given that they are not his own property. The establishment of any principle or the promulgation of any formal rule in connection with the verification of the ownership of goods is almost impossible after the audit has been presented. The character of the tests applied by the auditor to meet the circumstances that he encounteres measures his skill and ability. He is not really excusable, in any circumstances, from the charge of lack of ability for failure to detect such falsifications due to consigned goods, but the employment of an adequate number of reasonable precautions is always a good defense against the charge of negligence and carelessness.

Whatever may be the difficulties that have been discussed in the previous paragraph, all of them put together do not offer so many embarrassments to the auditor as those which occur when he attempts to establish correct prices that must be given to all the goods that are listed. Here he is confronted by past per-

formances, present conditions and future prospects, all of which may be used against him in such a plausible manner by the merchant or manufacturer who fixed the prices that he may be deceived into a misstatement of current assets and profits while attempting to be strictly impartial.

"Shall current prices for the goods for the raw materials prevail?"

"Certainly not," declares the manufacturer, "for the current prices are below what the cost prices of the goods are to me."

"Shall the cost price be used?"

"Certainly not," declares another manufacturer, "for at the present time I could sell the goods at a higher price than they cost me."

"Are these the cost prices on your manufactured goods?"

"They certainly are," replies the manufacturer. "They are all priced at the selling price and I have cut them down by 15%, which is the estimated profit that I make."

"On what do you base these estimates?" asks the auditor.

"They are the estimates that I have used for years," replies the manufacturer. "If I am not permitted to use these estimates, what cost figures can you present to me? I make fifty different articles in my factory. The raw material is charged to merchandise account, the sales are credited to merchandise account, all the labor that I use is charged to merchandise and every other expense that I have is charged to merchandise ultimately, whatever may be the expense accounts that I keep during the course of the year."

The custom of the trade is one of the most common arguments used in favor of certain methods of price determination of manufactured goods, and it is a fact that manufacturers of many classes of goods follow the same method in determining prices for their inventories.

The auditor here also encounters one of the greatest difficulties in practice. He knows that the price that should be used for the valuation of manufactured materials is the cost to manufacture, but he also knows that his client will not pay him to construct a system of cost accounts for the entire year from the original invoices, payrolls, expense bills and other charges that go to make up costs. He usually can arrive at a rough and ready determination of the costs by ascertaining the percentages of

profits of previous years to the sales, providing the inventory is valued on a sales basis. This sales price basis is one of the common methods used by manufacturers who do not know their costs. They always know what their selling prices are, and after excluding all items of income excepting the sales of material, the accountant may deduct the percentage that he has arrived at as a result of his investigations. The established rule of most auditors is to use the market price or the cost price whichever is the lower, and any departure from this rule should be carefully explained in the report or included in the certificate that is attached to the balance-sheet. Investors are more inquisitive about the prices used in an inventory than any other feature of the accountant's work, and the accountant can offer no better protection for himself than a complete and detailed description of the method that he used in arriving at the prices in the inventory.

The most obvious verification that the auditor must make is that of the accuracy of the clerical work, which means the extensions, the footings and the summaries of the totals. He is seldom expected to verify each extension on the inventory, but he would be grossly at fault if he allowed any material error to pass unnoticed.

To summarize the position that the auditor is in, the statement can be made that he is held responsible for the accuracy of all the figures in an inventory without being expected to perform the work which would be necessary in order to enable him to swear before a court that every figure is absolutely correct. This seemingly unreasonable responsibility he is asked to assume because of the skill and ability which his presence in the accounting profession implies. It is presumed that he is able to read the signs that hang on errors, and in this manner to discover them. He would probably secure few engagements if he insisted on being paid for going over every figure in the inventory. Morally he is responsible for the accuracy of all figures. Legally, however, he is not held responsible if the figures prove to be wrong, providing he has used due care and diligence, such as would ordinarily be used in the regular course of business or such care and diligence as the customs of the profession require.

Accounting Systems in Army Camps

By E. J. Holmes

The purpose of this article is to explain in a general way the accounting system in army camps used by the United States army in connection with the disbursement of funds appropriated by congress for authorized expenditures. It may be said that the system herein described is that which is used exclusively by the quartermaster corps in all its finance offices, the only difference between the work of any two offices being in the volume of certain routine. For example, in a camp payrolls of enlisted men and officers' pay form the largest part of the work; in a depot where quantities of supplies are purchased, the use of the public voucher for purchases will be greater, as will also civilian payrolls.

In each office the senior officer of the finance branch is accountable for funds and is known as the disbursing officer. He is responsible for receipts and the proper accounting for them, and for expenditures out of the working fund, with which he is furnished, and is assisted by one or more other officers and clerks enlisted in the quartermaster corps. His principal duties are to make all authorized payments, to collect funds which should lawfully be received by him, to see that all vouchers, cheques, abstracts and monthly reports are made out correctly and to account for all funds, which may be placed to his credit, to the department chief and to the treasurer of the United States.

The details concerning the proper filling out of vouchers, the preparation of monthly reports, the rates of pay of officers and enlisted men, etc., can be easily learned by one who has had a small amount of accounting experience. However, army regulations, bulletins issued by the staff bureaus and general orders govern cases in which expenditures may be made, and a disbursing officer must use his judgment in making many payments, a considerable amount of experience being necessary in order to interpret correctly the meaning of the various instructions furnished, in order to enable oneself to know when to make and when not to make payment. In many instances direct authority for certain payments must be obtained from the chief of the department in Washington.

For each disbursement a voucher is prepared in duplicate, one copy being forwarded at the end of the month to Washington, the other being retained in the files of the office. The public voucher for the purchase of supplies is used much and resembles an ordinary bill, but has space for signature of the payee certifying that the articles enumerated were furnished to the United States and that payment therefor has not been received.

The officers' pay voucher, payroll of enlisted men, commutation of rations and payroll of civilian employees are also among the vouchers most frequently used.

Perhaps it would be interesting to explain the "working fund" system, which was adopted about a year ago.

Formerly, expenses for the coming month were estimated by appropriations and the amount was placed to the credit of the disbursing officer with the treasurer of the United States. Funds could be expended only from the proper appropriation providing there was an unexpended balance.

At present, a working fund, sufficient to cover all probable expenditures for a monthly period, is used and at the end of the month the actual expenditures are "borrowed" from the working fund, at the same time being charged to the proper appropriation. The total expended up to the end of the month is reported to the quartermaster general and this amount is placed to the credit of the disbursing officer, which, together with the unexpended balance which he has on hand, brings his working fund back to the original amount.

Appropriations from which funds are most commonly spent are:

Pay of the army, 1919;
Pay of the army, 1918;
General appropriations, Q.M.C., 1919;
Supplies, services and transportation, 1918.

To illustrate further the working fund system, let us say that a fund of $1,000,000 is used and at the close of the month a request for funds (the form which is used for this purpose) is prepared showing the total expenditures for the month chargeable against the various appropriations. For example, we will say these amounts were: Pay of the army, 1919, $250,000;

Cashbook
Cheque stub
Abstract of disbursements
Cash blotter
Memorandum blotter.

The cashbook is loose-leaf, having columns for date, explanation and total and separate columns for each appropriation. This record, as well as the others, is not kept exactly alike in any two offices although the general principles laid down by regulations are observed. The cashbook is the principal office record, all transactions being summarized in it daily, including payments in currency and by cheque.

The cheque stub is, of course, a record of the cheques drawn and is ruled in book form, having columns for date, name of payee, voucher number, amount and continuous balance.

The abstract of disbursements is a record of all vouchers paid. Each voucher is entered numerically and shows in the proper column the voucher number, name of payee, total amount, amount charged to each appropriation (if the voucher covers more than one appropriation) and date.

The cash blotter is a record of all actual cash or currency transactions, like the ordinary commercial cashbook.

The memorandum blotter is kept for the purpose of facilitating the prompt preparation of the request for funds at the end of the month. This book shows expenditures classified according to appropriations, and also subdivisions of appropriations, which are known as "purposes." The book also shows at a glance the date, voucher number, name of payee, amount, item number and authority for payment of each voucher. The authority is very important and either a general or specific authority must be had to cover each expenditure made. Where special authorities are required, they should be on file in the office, and in all cases the authority for payment must be noted on the face of the voucher. Special authorities, for example, would be contained in a letter from the chief of the bureau, and the notation made on the voucher should show date and file number of the letter.

Trouble is not usually encountered in balancing the records where they have been kept by intelligent clerks, but occasionally a difference will be shown between the cheque stub and the abstract

of disbursements. Anyone with accounting experience can insert a few extra columns in the abstract of disbursements and cashbook, which will greatly facilitate the balancing of the various books with one another, and a complete check on the work for a whole month can be had in this way.

The cheque stub, having a continuous balance column, is easily balanced. The memorandum blotter balances with the abstract of disbursements. The total cash on hand plus the amount of credit with the treasurer of the United States should equal the total balance of the working fund unexpended as per cashbook.

These comprise all the important office records.

The principal of the monthly reports is the account current, which is a summary of the entire month's business and is prepared from the cashbook as soon after the close of the month as practicable. It is supported by a typewritten copy of the abstract of disbursements, together with all original copies of vouchers. The account current shows, as debits, by appropriations, the amount carried forward from the preceding month, amounts transferred from other officers, funds received from the treasurer of the United States and all collections. The latter are not allowed to be carried on the books more than thirty days, but must be deposited to the credit of the treasurer of the United States on the last day of the month. Credits appearing on the account current are for all disbursements as shown by vouchers, transfers to other officers, the amount of collections deposited to the credit of the treasurer of the United States, and the balance carried forward to the following month.

The amount of responsibility resting upon a disbursing officer handling a million or more dollars a month is great, as can be imagined, but to just what degree he is accountable for these funds is a debatable question. There is no doubt that he is accountable for the amount of actual cash handled in the office, there being no over and short account. He is responsible that all records be kept accurately and according to regulations, that all vouchers are filled out correctly and fully, that officers and enlisted men in the camp are paid promptly, that all bills are paid within a reasonable length of time so far as possible, and that monthly reports are prepared from the records and are submitted

within the required time, which is twenty days after the close of the month.

When the reports and vouchers are received in Washington they are carefully gone over, even to a check on clerical accuracy and the appropriation to which the amount has been charged. It is also seen that authority, either general or special, was granted for each payment.

When a voucher has been overpaid, or authority does not appear, or there is any other irregularity, the voucher is "suspended," that is, credit for making the disbursement is not given until the account has been justly settled. Suppose, for example, that a voucher in question is an officer's pay voucher and that the officer has been erroneously overpaid on it. The officer overpaid will be notified by Washington to deduct the amount on his next pay voucher. In case he has died in the meantime the amount will probably be deducted from his final settlement with the government, and if the United States does not finally receive reimbursement, the amount of the overpayment will be charged against the disbursing officer paying the account if he was negligent or careless in the performance of his duty.

Likewise in regard to authorities for payment of vouchers—if the disbursing officer has not shown any general or special authority, and cannot produce such authority, the voucher would be considered by the comptroller of the treasury as to the necessity of the expenditure for the public good after it had been submitted to the auditor for the war department.

The number of clerks assigned for duty to a finance office in a camp is from twenty to sixty. Men are usually selected for this work who have had bookkeeping or accounting experience. Troops are paid and vouchers for these payments are completed from the first to the tenth day of the month; payments to officers and the work in connection with officers' pay vouchers take from the twentieth to the thirtieth, the middle of the month being used in preparing monthly reports and in bringing the usual routine work up to date.

After considerable experience a disbursing officer is careful to make no overpayment and to see that he has authority for all expenditures. He will usually assume that, if he underpays somebody, that person can easily collect the balance due him;

Mail Order Accounting*

By Harry L. Cavanagh

One of the most conspicuous features of modern business is the remarkable growth of the mail order houses. This business, while not by any means of recent origin, has only of late years developed into the mammoth proportions that have amazed the commercial world.

One may form some conception of the magnitude and rapid growth of this particular business from the fact that one large house increased its sales from $66,000,000.00 in 1911 to $178,000,000.00 in 1917, and another house increased its sales from $40,000,000.00 in 1913 to $74,000,000.00 in 1917. Many other concerns, while not so large, have also had wonderful success.

The volume of orders and the small margin of gross profit on which the companies must do business make it imperative that the overhead expense be kept at a minimum. This has been the cause of many problems for the accountant, for, as one of the officers of a large company stated, "We do not want to spend a dollar to keep track of a quarter."

The accounting suitable for the mail order business is very much the same as that required for a retail department store, the various kinds of merchandise being grouped and subdivided into departments, known by letter or number, preferably the latter. Each department is charged with its purchases of merchandise, direct expenses and labor and a proportion of the indirect overhead, and credited with its sales. The advertising should also be charged to the various departments on an equitable basis, and as this is one of the principal items of expense, the distribution is most important.

Each department should be, as it were, a complete store in itself, and the accounting should reflect this condition.

There are many unusual features to be found in a mail order house, one of them being that the company receives payment for its merchandise in advance—that is, in nearly every case the cash accompanies the order. There are various ways in which this prepayment may be handled, but the most practical is as follows:

*A thesis presented at the May, 1918, examinations of the American Institute of Accountants.

The total cash received on orders should be credited to an account designated "customers," against which will be charged the sale and the postage or express charges that were included in the remittance, and also any refund of the original amount, the aim being to clear the "customers" account of completed orders and leave therein only the company's liability for unfilled orders.

Ascertaining the sales has been one of the most perplexing problems with which the large houses have had to contend. Various methods have been employed, but as yet no thoroughly satisfactory or economical one has been devised.

The most appropriate time for determining sales is at the balancing of the order, that is, after the various items called for in the order have been packed or assembled, the bill is made up and the customer notified that his remittance was short or a refund is made for any amount that may have been overpaid.

In the smaller houses the analyzing of the sales is not difficult as the volume is not large, but in the larger houses where the number of orders shipped each day runs up into the thousands, and prompt shipments are essential, the analyzing and totaling is a great task. However, by keeping the number of departments down to, say, twenty or so principal departments, the sales could be analyzed at the time of balancing the order by abstracting on a sheet large enough to have a column for each department. The reason for having so few departments is to have all departments on one sheet. This work could be performed by girls who would, with a little experience, become quick and accurate. At the close of each day the sheets would be collected, footed and summarized, thus ascertaining the cash sales for the day.

C. O. D. shipments and other than cash sales could be analyzed without much difficulty as the number of such sales is not large. The method outlined herewith gives the amount of actual sales each day, and is more satisfactory than the method now generally employed of having each department report its shipments daily and using those figures as the sales. The principal departments could be further subdivided and their sales ascertained reasonably accurately by one of the several methods now in use, having, under the plan formulated herewith, a controlling figure on the principal departments' sales.

An inventory should be taken at least twice a year of the cash on the unfilled orders in the house and the balance shown

on customers' account should be adjusted therewith. It is to be expected that there will be a difference to adjust, especially in the larger houses, as it is practically impossible to keep the account with such accuracy that no adjustment will be necessary. Furthermore, the cost of such accuracy would be prohibitive.

The handling of the cash refunds made to customers is also a problem. To decide to just what extent the detail should be carried is hard, as the number of refunds issued each day runs up into the thousands. The aim is to record these issues with as little detail as possible, yet to have some check on them.

The general plan is to divide the refund cheques into three classes: first, refunds from five to ninety-nine cents; second, those from one to ten dollars; and third, those of ten dollars and over. No cash refunds for less than five cents are given as no charge for less than five cents is made.

The refund cheques from five to ninety-nine cents are, in most houses, certificates printed for each amount from five to ninety-nine cents and made payable to bearer, so that when a refund for, say, seventy-two cents is made, a certificate calling for that amount is delivered. No record of the certificates issued is kept other than the total of the amount issued each day. This total is set upon the books as a liability, either at the end of the week or month, and charged to the proper accounts, e.g., refunds issued to balance an order would be charged against customers' account while refunds issued for return goods would be charged against sales, etc. As these certificates are redeemed either through banks or as cash on additional orders, the amount so redeemed should be charged against the amount shown as outstanding on the books and the certificates should be cancelled. As it is impossible to reconcile the amount outstanding, a new series should be started at least once a year and the issues and redemptions of each series should be kept in separate accounts. By this method, after a few years' time, a series would show a relatively small amount outstanding, and it is then reasonably safe to assume that only a small portion of this amount will be claimed, so the balance may properly be written off.

The second and third classes of refund cheques mentioned should be handled in the usual manner of issuing cheques, the amount issued being set up as a liability and the proper accounts debited. The reason for separating the cheques into two classes

is to have closer supervision of those issued over ten dollars. As to what extent the outstanding cheques from one to ten dollars should be reconciled and checked is a matter of opinion, governed in large measure by the number issued. But the cheques over ten dollars should be carefully compared, when paid, with the office record, and those outstanding should be reconciled at least twice a year with the ledger balance.

The manner of making the office record has been given considerable attention. The use of a cheque stub or register would never do where there are thousands of cheques issued each day. A very satisfactory record is to have a carbon copy made showing the name, amount and number of each cheque. This duplicate is filed numerically, and when the original cheque has been paid the duplicate is withdrawn from the file. The total of the duplicates withdrawn each day should correspond with the total paid, thus affording a check on the amount paid. A total of the duplicates in the file should be the amount of outstanding cheques.

The manner of handling the amounts due from customers is also somewhat unusual. In many houses amounts of less than five cents are ignored, and of the amounts from five to fifty cents no record is kept, the customer being notified by the forwarding of a printed slip which states the amount due.

The total amount of these items is treated as a separate account, to which payments are credited, and at the close of the fiscal period the balance is prorated against the various departments.

Of the amount over fifty cents the only record is a carbon duplicate of the charge slip. These duplicates are filed in the most convenient manner, and when paid the duplicate is removed from the file. The total of these charge slips represents the unpaid accounts and should agree with the controlling account on the general ledger.

Another interesting feature is the manner of handling the cost of preparing, publishing and distributing the general catalogues, of which there are usually two a year. The preparation of a mail order catalogue requires several months' preliminary work—the drawings have to be ordered, cuts and electros made and the editorial work done. This work is called catalogue preparation, and, as it costs many thousands of dollars, considerable attention should be given to the accounting relative thereto.

It is well to designate each general catalogue by a number, so that the charges may be made against the particular catalogue for which they were intended. A controlling account should be set up on the general ledger for each catalogue and the details should be kept in a subledger.

The preparation work should be divided under these general headings:

Drawings
Electros, cuts and zincs
Special type
Editorial
Publicity department expense

These general accounts should be further divided to correspond with the merchandise departments, so that it may be seen just what each department has expended in the different classes of preparation.

After the preparation work has been completed the cost is distributed to the various departments for which the work has been performed, each department assuming a portion of the cost of preparing various parts of the catalogue which are not directly chargeable to any department. As to when the charge should be made to the departments depends upon the custom of the company, but it should be made during the period when each department is deriving the benefits of the catalogue.

The cost of publishing is another feature that requires careful attention. Most catalogues are purchased at a stated price for the stock, press work and binding, and the distribution of the cost to the departments should be made on the basis of pages used in the catalogue. The general space should be prorated over the different departments on the same basis.

The cost of distribution is also made on the basis of pages used, and consists of addressing, mailing, wrappers and the overhead expense of the distribution department. The feature that troubles the accountant most in regard to the catalogue expense is a basis of distribution which will equalize the charge over a period, and not leave some months with practically no charges while in other months the charges would be enormous. This can be overcome, however, by charging to each department a certain estimated percentage of the sales each month and crediting a reserve account. These estimated charges could be adjusted when the actual costs were determined.

Duties of a Factory Cost Accountant*

By Joseph Gill

Time was when the manufacturer was able to get along quite comfortably without worrying about cost accounts. His business was generally small, and he was familiar with every detail of it. He could estimate with remarkable ease and accuracy the material and the time required for any job that came into the shop, and he had a very shrewd appreciation of the bearing his expenses had on his production. He was, therefore, not only able to quote prices that would leave him a margin of profit, but by a sort of sixth sense, which was really an accumulation of experience, he knew when production was lagging and was able to go after the cause and remove it before it showed up in the profit and loss account.

As his business grew and machinery came into more general use, and as machines themselves grew bigger and more complex and more expensive, the mass of detail became too much for him to assimilate, his power of shaking down facts into their proper relation to each other became impaired and he was compelled to rely more and more on his books and records; and according as his books and records gave him necessary facts or failed to do so, he was able to keep his hand on the helm of his business and direct it intelligently or drifted along blindly until he was on the rocks.

The type of manufacturer who is content to calculate the labor and material on a job and guess all the rest is fast disappearing. He still succeeds occasionally in conducting a profitable business, but unless unusually favored by circumstances he ultimately fails. Costs and selling prices vary according to conditions, but he must usually sell at the market price, if at all, and he continues to sell lines on which, without knowing it, he is losing money, while his competitors either leave those lines to him, because they know them to be unprofitable, and devote their energies to other lines, or have been able to effect such economies by the elimination of waste and the better utilization of their facilities that they can make a profit where he cannot.

*A thesis presented at the May, 1918, examinations of the American Institute of Accountants.

The need of accurate and trustworthy information regarding production and production costs has long been recognized, but the success that followed the adoption of F. W. Taylor's methods of scientific management created an immediate demand for production records in all quarters. "Efficiency" became the great watchword, and into the ranks of the "efficiency engineers" floated "business doctors" and other "experts," who knew little or nothing about the principles of scientific management but were agreed that a cost system was the thing. Cost clerks left their jobs, carried away the forms they had been using and tried to jam their one system into businesses and conditions in which it would not and never could fit. Other "experts" had no previous experience in costing and so were not hampered by any pre-conceived notions.

They succeeded, however, with little difficulty, in getting large fees from manufacturers, but when systems that had been installed at great expense had to be abandoned entirely or remodelled on plans much simpler and less ambitious than the originals, costing lost a lot of its popularity.

But the bad and unsuitable systems were not always the work of mushroom experts nor were the systems always to blame. Quite frequently accountants were unable to make headway against the bitter hostility of employees whose interests might be affected by new methods, and who succeeded, by obstruction and deliberate falsification, in discrediting the new systems before they were fairly put into operation. They had also to contend with the type of manufacturer who appeared to think that a new cost system would work miracles or was unable to appreciate the importance of the information he received.

The writer has in mind the manager of an establishment in which a large amount of "repeat" business was done, which was losing money steadily and consistently. A cost system was installed and the records showed that the machine time varied on jobs similar in every respect, and that there were considerable variations in the quantities of raw materials used on jobs calling for the same amount of finished product. Investigation showed that the time recorded had actually been spent on the jobs, and that the materials charged had been withdrawn from the stores by requisition for the jobs in question, but the conclusion reached by this man was that a cost system that did not show uniform

costs was no help to him in making quotations and was consequently worthless. The fact that jobs that were completed in five hours on one day took six and a half hours and used 10% more material on another day conveyed nothing to him.

There is a minimum of information, however, that the manufacturer must have, if he is to hold his own, and much more that he can use to advantage, and it is the function of the cost accountant to get that information for him and to give it to him in such shape that he can use it to the best advantage. As has been said before, selling prices are frequently fixed by competition and other conditions, and the only choice the manufacturer has is whether he will sell at a certain price or not at all. Price fixing, therefore, is a secondary consideration.

A manufacturer of machines of a standard size and pattern will be interested to learn that machines which he is selling at $30.00 cost $3.00 per machine more to make in April than in March, but he is not satisfied to stop at that. That $3.00 may make all the difference between a profit and a loss and he will want to know where it went and what he got for it, for he must do one of three things—he must reduce his cost to a figure that will enable him to continue selling at $30.00 and make a profit; he must get more money for his machine; or, if he cannot reduce the cost or increase the selling price, he must stop making that particular machine.

If his cost records merely show the total cost per machine, he is getting only part of the information he needs. What he must learn is at what stage in the manufacture of the machine the cost increased and why, and to do this he must divide the machine and its production into parts and operations as far as is practicable, and compare the cost of each part or operation in one period with the cost of the same part or operation in other periods. If he is able to do this, he will soon arrive at a figure of cost at which each part should be produced under normal conditions. In other words he will establish standards for comparison. Failure to reach the standard will cause investigation, and the net result will be the elimination of unnecessary expense and the reduction of cost to the lowest possible figure.

In its simplest form a manufactured article consists of raw material that has been changed in some respect by the application of labor. Assuming that the whole of the raw material has been

used or that what remains has no value, the value of the finished article to the manufacturer is what it cost, namely, the sum of the values of the raw material and the labor expended on it. He has combined two values in one article, and the manufactured article is worth neither more nor less than the sum of the values that went into it, until somebody else who wants the article offers more or less than that amount for it and the offer is accepted, i.e., until it is sold. The fact that it is sometimes good conservative practice to anticipate loss by writing down the value of finished stock on hand does not affect the issue.

A blacksmith making horseshoes on a hand forge which he hires by the day combines not less than four values—the raw material he uses, his own labor, the fuel he uses, and finally the value to him of the use of the forge, which is really a combination of values—wear and tear, repairs, etc., all included in the price for use of the forge. The cost of his finished product is the sum of these, and if he has been engaged all day in making horseshoes of a uniform size and pattern, he can value his product at the end of the day by dividing the total cost by the number of shoes he has produced, which will give him a cost per shoe.

If, however, part of the day was spent in making horseshoes and part in repairing a plough, his problem will be rather more difficult. He knows just what material he used on the horseshoe job and also the time he spent on it. Those are direct charges. But how is he to determine the proportion of forge rent that went to the making of horseshoes and the amount of fuel used? This problem, simple in itself, is essentially the same problem that faces the cost accountant everywhere.

The value to be placed on the product of a factory is the sum of all the values that were used to produce that product—those that went directly into it and those that went into it indirectly. (This does not necessarily mean, however, that the product should bear the burden of unforeseen or unusual losses due to stoppages, idle machines or serious accidents to machinery). The direct charges—raw material and direct labor—can be readily ascertained and present no other than mechanical difficulties in ascertaining and recording them. But the indirect charges, variously described as indirect expense, overhead expense or burden, present a very different problem, and most of the methods in use can be tested in apportioning the cost of the blacksmith's forge.

These methods are:

1. Percentage on labor and material
2. Percentage on labor
3. Man-hour rate
4. Old machine rate
5. New machine rate

Assuming that the value of the raw material used during the day was $3.00, that the smith valued his time for the day at $5.00, that the rent of the forge was $1.00 and that the fuel used cost $1.00, we have a total cost of $10.00 for the day. Assuming also that half the day was spent in making horseshoes and the other half in repairing the plough, and that all the raw material was used on the horseshoes, we get labor and material costs of $5.50 for the horseshoes and $2.50 for the plough repairs. The burden, amounting to $2.00, is 25% of the total labor and material costs, and on that basis the use of the forge cost $1.38 for the half day on which it was used in making horseshoes, and only 62 cents for the other half day on which it was used in repairing the plough.

Suppose, moreover, that the plough repairs were unfinished and occupied half of the next day, and that the remainder of the second day was spent in making horseshoes again. The stock of iron having run out, however, the smith had to renew it, paying one-sixth more than he had paid for that used on the previous day. The labor and material costs would then be $6.00 for the horseshoes and $2.50 for the plough repairs, a total of $8.50, and the burden, $2.00, would be 23.5% of this sum. The forge cost for the second day under identical conditions would then be $1.41 for one half day and 59 cents for the other, as compared with $1.38 and 62 cents respectively on the first day. This distribution is obviously unfair and inaccurate.

Using the second method, the labor cost was $5.00 for the smith's time, of which $2.50 went to each job. The burden amounted to 40% of the labor cost. Distributed on this basis $1.00 would be charged to each job. But if it had been necessary to have a helper in making horseshoes and he had received $2.00 for his half day's labor, the labor costs would then be $4.50 for the one job and $2.50 for the other, a total of $7.00. The $2.00 is approximately 28.6% of $7.00 and on this basis the use of the forge would cost $1.29 for the one half day and 71 cents for the

other. This method is therefore not applicable in this case and can only be equitably applied when machines or other production centres are of a uniform size and character and are constantly tended by the same number of men paid at uniform rates.

The man-hour rate is arrived at by dividing the burden by the number of hours of direct labor and adding to the cost of labor and material the amount of burden determined by the number of hours the machine or other production centre was in use. Assuming the day to be 8 hours, the hourly burden was 25 cents and the amount chargeable to each job would be $1.00 for each half day. But if the smith, in addition to the work he was doing himself, had other work in hand and had hired in the same shop a lathe or other machine at $6.00 a day and engaged a man to tend it, the total burden would be $8.00 and the labor hours 16, an average of 50 cents an hour. The burden charge for making horseshoes and repairing the plough would then be $2.00 in each case, the increase over the former rate being due to conditions not connected in any way with the production of the horseshoes or the plough repairs.

The old machine rate is very similar to the man-hour method, the burden being divided by the number of machines and distributed on an hourly basis. It can obviously only be used where the machines in a shop or department are of the same kind and size.

The new machine rate provides for distributing the burden over the product according to the service actually rendered in its production. The plant is divided into production centres, which may be machines, groups of machines or departments, and all items of indirect expense are traced to these production centres. The annual cost of running a lathe, for instance, is determined by adding together all the expenses incidental to its operation and maintenance—rent, based on floor space occupied, depreciation, repairs, superintendence, such items of supplies, indirect labor and other expenses as can be directly charged or fairly apportioned, power, measured or based on the horse-power of the machine, and a share of general manufacturing expense—dividing such annual cost by the normal number of working hours in a year and thus obtaining a cost per hour to be added to the cost of labor and material. The blacksmith's forge is the production centre, and the rent charged for it, plus the cost of fuel con-

sumed, divided by the eight working hours of the day gives a cost of 25 cents an hour. Each of the two jobs received the benefit of its use for 4 hours and should be charged for that use and for that alone.

The determination of machine-hour rates is not an easy matter, as it is difficult to estimate in advance what departmental and indirect expenses are likely to amount to, and it will be found necessary to change the rates at various times. Changes in rates, however, should be made only when necessitated or warranted by changes in the actual expense, and the rates should not be varied because of the idle time of machines. That proportion of burden that should have been absorbed by machines that were idle should be credited to the burden account and charged direct to profit and loss or shown as a distinct item added to the normal cost. Opinions may and do differ as to the particular method of treatment of such unused or unearned burden, but there is little disposition to regard it as anything but a loss.

No two cost systems are exactly alike; consequently the routine work of cost accountants varies according to the conditions they have to meet; but along certain broad lines they have the same responsibilities. They must see that the receipt and issue of stores and raw materials are properly recorded, that the stores ledger is kept up-to-date, that the stores on hand are checked in at least a few instances each day by actual count or other measure and agreed with the balance shown by the stores ledger, preferably when stocks are low, and that all requisitions for stores withdrawn are entered on the cost sheets or intermediate records daily. Workmen's daily time cards should be compared with the time office records daily before labor is charged out, and labor distribution should be compared weekly or monthly with the payrolls. Machine records should be written up promptly, even though, as is sometimes the case, the work done on a machine for the month can be recorded on one sheet. Provision should be made for summarizing the charges to cost sheets in order that the monthly postings may be made to controlling accounts and the cost records may be included in the general financial records.

Cost standards have to be established or changed, charges to burden scrutinized and compared with earlier charges or budget estimates, and machine rates changed when necessary. All records should be kept strictly up to date, not merely to avoid an accumu-

lation of work at the end of the month but for the infinitely more important purpose of providing the factory manager or superintendent with up-to-the-minute information.

The cost sheets themselves can be made extremely interesting and valuable documents. It is sometimes possible to record on the cost sheets the entire history of an order from the time it is received until the goods are billed, and with references properly recorded on the sheets the cost of any operation or any other information can be looked up immediately.

Then there are operating and production reports to be prepared for the information of the management. The manager, superintendent or foreman or all of them should know on what orders work has not yet begun, the orders completed each day and the status of work on the machines. Such matters as spoiled work, idle machines and excessive repair costs or production costs should be dealt with promptly, and actual costs should be compared with estimates. Charts should be used whenever possible to show fluctuations in direct or indirect costs of production.

At all times the cost accountant must deal with conditions as he finds them and it is absolutely essential that he be familiar with the factory and its operations. Every dollar's worth of material and service must be run down to the point at which it enters into the production of the finished article. He must design and operate his system with that object in view, and he obviously cannot do that unless he is familiar with all the channels leading to production.

His system should be as simple as is consistent with efficiency. Any system, whether simple or complex, that does not do what is required of it is not merely worthless—it is a positive danger. It should never be forgotten that the value of the information obtained from the cost records is determined by the use the management is able to make of it. If it is essential to the profitable conduct of the business it must be obtained, whatever its cost, but if it is useful without being essential it may or may not be worth the cost of getting it.

The system should be so framed as to admit of temporary or permanent expansion in any direction without affecting the general structure, in order that tests may be made in different directions at suitable times and intervals, to be continued or dis-

continued as circumstances dictate. A check may be kept in this manner on minor and subsidiary operations when the expense of keeping continuous records would be prohibitive.

Costing demands the handling of a mass of detail, but it is a mistake for a cost accountant to permit himself to become submerged in it. He should detach himself occasionally and try to see the factory and his work as a whole from a distance. Matters may assume surprisingly different proportions when seen in perspective after a very close view, and he can have no finer qualification than the ability to recognize factors and appraise them at their true value.

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EDITORIAL

Reconstruction

We have lived so long under the strain and stress of war that it is impossible to realize that we are again almost at peace. The continuous pressure of four years has left an impression which must continue for a long while to come.

At first we shall experience the mental relief, but it will be much longer before we are relieved of the almost equally heavy burden of labor and duty.

The war came suddenly, found us unprepared and we were compelled to adjust ourselves to conditions the like of which none of us had known before. So thoroughly was this adjustment made that the great majority of us will find it difficult to reconcile our minds to the peaceful circumstances into which we are coming.

We have lived in a realm of excitement and intense mental agony, which made us forget ordinary things. The war required all our efforts, our money, our time, our thought—and everything was given ungrudgingly.

Now, however, comes the sudden relaxation, the utter collapse of all the enemy powers, and we stand somewhat dazed and wonder what is to follow.

The accounting profession more than most vocations will find the advent of peace an increasing strain. Accountancy is the gyroscope of business. We have run along for four years with no thought of equilibrium so long as the goal could be reached. Business, finance, industry, all the activities of modern life relinquished their hold upon practical things. Nothing mattered till the war was won.

But now we stand and contemplate the wreck of the foe and the duty of rehabilitation for the world which confronts us.

Members of the national congress affirm that the day of wreckless extravagance is at an end. There are to be investigations, curtailings of expense, resumption of rational business practices and, in a word, return to normality.

The country will have assumed a burden of approximately thirty billions of dollars, part of which will be paid in immediate taxes and part will not be paid during the life-time of most men now living. Taxation measures will be the chief interest of the financial world for many years. The burden will be hard to bear, and when the enthusiasm of war is past there will be much grumbling, and collection of taxes will be extremely difficult.

Business as a whole must revert to a fair basis. The enormous profits which have been made during the war cannot be continued in peace. The public will refuse to pay the prices which have been asked. Wages must come down to a reasonable level, and the whole commercial and financial structure of the country must be repaired.

During the war the accounting profession has rendered splendid service. Many of its members are still working for the government in one capacity or another, and their labors will continue for some months to come, but gradually we trust that the government will release all accountants who are not absolutely needed in government service and permit them to return to the practice of their profession so that the serious shortage of men may be somewhat lessened.

When these men return and the profession is again in a position to undertake the important duties which it will be called upon to perform, accountants will have an opportunity even greater than that which existed during the war to demonstrate their peculiar usefulness.

Reconstruction periods are always financially more difficult than war times. The history of the United States immediately following the civil war is an illustration of the grave dangers into which a nation is likely to be plunged upon the resumption of peace. In the late sixties and early seventies there seemed to be no commercial balance. There was no gyroscope.

Now, however, we have a better organized body politic and a far better regulated method of business, and if those who are

qualified to superintend the readjustments are given the opportunity, the reconstruction period should be passed without disaster, and the country should come ere long into something approaching a normal condition.

Every individual member of the accounting profession has a duty to perform. He must stand staunch and strong for the right, must resist a temptation which will be offered in many forms and must see to it that the re-establishment of business be carried out without fraud against the government or the public.

Especially in the matter of taxation will there be many attempts to escape the proper share of the national burden. The accountant will stand in a fiduciary capacity, to both the government and the taxpayer. If he fails in his loyalty to either he betrays his profession.

Wages

Samuel Gompers, president of the American Federation of Labor, has allowed it to be known that there will be no reduction of wages and no extension of working hours following the conclusion of peace.

Viewed from an economic and accounting standpoint this is a most remarkable statement. It seems to convey the idea that society is to be remade so as to coddle the working man at the expense of other classes. We trust that this was not the idea Mr. Gompers had in mind, but his utterance sounds ominous.

Most of us recognize that labor should not be the first to feel the inevitable effects of adjustment, but it is inconceivable that labor should escape entirely.

The question of wages is one of the most acute that will call for consideration. So long as the price of food, clothing and other necessaries remains at the present exorbitant figure it does not seem fair to expect the working man to accept a lower rate of wages than that which he now receives. But the cost of living will certainly decline, if not rapidly, nevertheless steadily.

Sooner or later we shall get away from the guaranteed minimum price of wheat, for example, and the law of supply and demand will be allowed to operate. In other words, we shall begin to return to a normal condition and so returning we shall find prices more closely approximating values.

When that much desired day of normal conditions shall have arrived, the working man and every other class will discover that the justification for high wages will be largely removed.

During the war wages have increased to a point in excess of that required by the increased cost of living, but the excuse for demanding higher wages has been generally accepted in spite of the facts.

When peace shall have returned and the unavoidable changes in economic conditions take place, wages must certainly bear their share of the decline. All the fine hopes to which Mr. Gompers gives expression will be received with acclaim by his followers, but they are foredoomed to disappointment. The question of compensation of labor is no more immune from the economic laws than is any other factor of the situation.

State Ownership

The director general of the United States government railways expresses the thought that the experiences of the American public during the few months following the signing of the treaty of peace will determine whether or not the railways and other public utilities which have been seized by the government shall remain under government control.

Does Mr. McAdoo think months will be required?

We admit, of course, that there can be great saving in the administrative end of railway affairs, and are ready to admit that in time to come it may not be altogether wise to revert to an uncontrolled competition between roads. Mr. McAdoo, however, does not lay stress upon the fact that there will be a considerable saving in administrative expenses, but argues rather that the public will be better served.

Mr. McAdoo understands accountancy as well as the ordinary business man understands it, and we would, with deep respect, suggest to him that he apply to his theories the harsh light of scientific knowledge. Government owned railways may be run for the benefit of the administration which may happen to be in power, but we fail to see wherein the public will benefit from the utterly chaotic condition of railroad service and the exceeding improbability of lower rates.

If these things can be said of the railways, what shall be said of the telephone, the telegraph and the cable?

Of course, if we run to the extreme of patriotic fervor we may say that it was necessary to take over the railroads to ensure the transportation of war material and troops. Be we patriotic as we may, however, our sense of reason has not yet been developed to a point where it can discover any justification for the seizure of the telephone, telegraph and cable lines nor yet for the perpetuation of government control of the railways.

Income Tax Department

EDITED BY JOHN B. NIVEN, C.P.A.

The revenue law to govern income taxes for the current year is still undergoing violent reshaping processes. The original house bill had already been largely reframed by the senate finance committee when the coming of peace prompted the secretary of the treasury to advise still further readjustment before the committee reported the bill to the senate. The prospect, therefore, is for a new record of delayed enactment, but with at least one compensating advantage from a practical point of view, if the secretary's advice is followed: that the rates for 1919 may be settled at the same time and thus be known in advance.

EXEMPT INTEREST ON LIBERTY BONDS

It may be opportune to here recite the exemptions which have been accorded to Liberty bond interest by the various acts which have authorized the exemptions.

Exempt from all taxes (including normal and additional income taxes, and excess or war-profits taxes):

All interest on first Liberty loan 3½% bonds. This exemption was created by the act authorizing the issue.

Exempt from all normal income taxes:

All interest on bonds of all issues. This exemption, as to bonds subsequent to the first Liberty loan, was created by the second Liberty bond act of September 24, 1917, which exempted bonds issued after September 1, 1917, from all taxes except (a) estate or inheritance taxes and (b) surtaxes, excess profits and war-profits taxes.

Additional exemptions from additional income taxes (surtaxes), excess profits and war-profits taxes:

1. Interest on an amount of bonds issued after September 1, 1917, not in excess of This is a separate exemption over and above those mentioned below.	$5,000.00
2. Interest on an amount of first Liberty loan 3½% bonds converted into fourth Liberty loan 4¼% bonds	$30,000.00
3. Interest on an amount of fourth Liberty loan bonds not exceeding	$30,000.00
4. Conditionally—Interest on an amount of (a) First Liberty loan converted, dated either November 15, 1917, or May 9, 1918; (b) Second Liberty loan, converted or unconverted; and (c) Third Liberty loan; together, not in excess of	$45,000.00

The condition of this exemption is that the exempt principal shall not exceed one and one-half times the amount of fourth Liberty loan bonds originally subscribed for and still owned by the taxpayer at the date of his return.

Treasury Decisions

There are only two treasury decisions affecting income taxes to report this month.

One (T. D. 2762) outlines the application to trusts, partnerships and corporations of the exemptions on Liberty bond interest. The exemptions in respect of bonds held or subscribed by corporations belong directly to the corporations, which bear the taxes, without passing to the stockholders; but with trusts and partnerships the claim for exemption may go to individuals with the liability for tax. If the beneficiary of the trust (as in the case of regularly distributable income) or the partner in the firm (as under the present income tax law) bears the tax, he is also entitled to a proportionate exemption. If the trust bears the tax (as where the income accumulates) or the partnership (as at present under the excess profits tax law) the trust or the partnership claims the exemption. It would appear from this that, in partnership cases, the exemptions may apply in part to both partnership and the partners: to the partnership in case of excess profits taxes; to the members in case of individual surtaxes.

In T. D. 2763 the department adopts the views of accountants generally, as previously stated in these pages, with regard to accounting for income under the corporation undistributed net income tax law. Where income cannot be traced to isolated subjects, it is sufficient to show, by submission of comparative balance-sheets as at the beginning and end of the taxable year and six months later, that the income has been absorbed in a net increase in business assets—only the amount in superfluous cash or outside securities being regarded as undistributed and unemployed.

TREASURY RULINGS

(T. D. 2762, Oct. 18, 1918.)

Income and excess profits taxes.

Exemption of interest on Liberty bonds held or subscribed for by trustees, partnerships, and corporations under supplement to second Liberty bond act.

Questions have arisen with regard to the exemption of interest on bonds held or subscribed for by trustees, partnerships, or corporations under section 1 of the supplement to the second Liberty bond act, approved September 24, 1918. This section is as follows:

That until the expiration of two years after the date of the termination of the war between the United States and the imperial German government, as fixed by proclamation of the president—

(1) That interest on an amount of bonds of the fourth Liberty loan the principal of which does not exceed $30,000, owned by any individual, partnership, association, or corporation, shall be exempt from *graduated additional income taxes,* commonly known as *surtaxes,* and *excess and war profits taxes,* now or hereafter imposed by the United States, upon the income or profits of individuals, partnerships, associations, or corporations;

(2) The interest received after January 1, 1918, on an amount of bonds of the first Liberty loan converted, dated either November 15, 1917, or May 9, 1918, the second Liberty loan, converted and unconverted, and the third Liberty loan, the principal of which does not exceed $45,000 in the aggregate, owned by any individual, partnership, association, or corporation, shall be *exempt from such taxes: provided, however,* that no owner of such bonds shall be entitled to such exemption in respect to the interest on an aggregate principal amount of such bonds exceeding one and one-half times the principal amount of bonds of the fourth Liberty loan originally subscribed for by such owner and still owned by him at the date of his tax return; and

(3) The interest on an amount of bonds, the principal of which does not exceed $30,000, owned by any individual, partnership, association, or corporation, issued upon conversion of 3½ per centum bonds of the first Liberty loan in the exercise of any privilege arising as a consequence of the issue of bonds of the fourth Liberty loan, shall be *exempt from such taxes.*

The exemption provided in this section shall be in addition to the exemption provided in section 7 of the second Liberty bond act in respect to the interest on an amount of bonds and certificates, authorized by such act and amendments thereto, the principal of which does not exceed in the aggregate $5,000, and in addition to all other exemptions provided in the second Liberty bond act.

The exemptions authorized by subdivisions 1 and 3 of this section are conferred by reason of the ownership of bonds therein referred to, while the exemption authorized by subdivision 2 is a collateral exemption conferred upon the bonds therein referred to by reason of the original subscription for and continued holding of fourth Liberty loan bonds.

(1) *Trusts.*—When income as such is taxable to beneficiaries, as in the case, under the present income tax law, of a trust the income of which is to be distributed annually or regularly between existing beneficiaries, each beneficiary is regarded as the owner of a proportionate part of the bonds held in trust and is entitled to exemption on account of such ownership as if he owned such proportionate part of the bonds directly. In such a case a subscription by a trustee for bonds of the fourth Liberty loan constitutes each beneficiary existing at the time of such subscription an original subscriber for his proportionate part of such bonds and entitles such beneficiary to the collateral exemption of interest on bonds of previous issues, whether owned by such beneficiary or by the trustee, as if the beneficiary had himself originally subscribed for such proportionate part of the bonds, and a subscription by such beneficiary for bonds of the fourth Liberty loan entitles him to the collateral exemption of interest on bonds of previous issues held by the trustee. When income is taxable to the trustee, as in the case, under the present income tax law, of a trust the income of which is accumulated for the benefit of unborn or unascertained persons, the trustee is regarded as the owner of all the bonds held in trust and the trust is entitled to exemption on account of such ownership. In such a case a subscription by a trustee constitutes the trustee as such the original subscriber and entitles the trust, on account of such subscription, to the collateral exemption of interest on bonds of previous issues.

(2) *Partnerships.*—When income of a partnership is taxable to the individual partners, as under the present income-tax law, each partner is treated as the owner of a proportionate part of the bonds held by the partnership and entitled to exemption on account of such ownership as if such partner owned such proportionate part of the bonds directly. When the income of a partnership is taxable to the partnership as such, as under the present excess-profits tax law, the partnership is treated as the owner of the bonds held by it and entitled to exemption from taxes assessed upon the income of the partnership as such. With reference to a tax assessed

upon an individual partner on his share of the partnership income, such partner, if a partner at the time of the original subscription by the partnership for bonds of the fourth Liberty loan, is treated as an original subscriber for a proportionate part of such bonds subscribed for by the partnership and as entitled to the collateral exemption of interest on bonds of previous issues on account of such original subscription for bonds of the fourth Liberty loan, as if he had subscribed directly for such proportionate part of the bonds. With reference to a tax assessed to the partnership upon the partnership income as a whole, such partnership is the original subscriber and entitled to the collateral exemption of interest on bonds of previous issues on account of such original subscription for bonds of the fourth Liberty loan.

(3) *Corporations.*—Income of a corporation as such is taxable to the corporation and is not taxable to the stockholders. The corporation, and not the stockholders, is regarded as the owner of the bonds held by the corporation and entitled to exemption on account of such ownership. When bonds of the fourth Liberty loan are subscribed for by the corporation it, and not the stockholders, is the original subscriber and entitled to the collateral exemption of interest on bonds of previous issues on account of such original subscription.

(T. D. 2763, Oct. 21, 1918.)

Income tax.

Tax on undistributed net income of corporations, joint-stock companies and associations, and insurance companies.

The following rulings with respect to the tax on undistributed income imposed by section 10 (b), added to title I of the revenue act of September 8, 1916, by section 1206 of title XII of the war-revenue act of October 3, 1917, are additional to the rulings contained in T. D. 2736.

1. *Undistributed net income subject to tax.*—In determining the amount of net income of the taxable year "remaining undistributed" six months after its close and not "invested and employed in the business," there may in general be subtracted the amount of any interest paid by the corporation but not allowed to be deducted for income-tax purposes, and also the amount of contributions properly made for charitable or war purposes.

2. *Use of balance-sheets to show employment of undistributed net income.*—A corporation unable to show by tracing into particular assets or into the decrease of particular liabilities the employment of undistributed net income in the business, is permitted to claim a benefit of what may be shown by a balance-sheet for the date of the expiration of six months after the taxable year, or by a comparative balance-sheet, as indicated below.

Thus, if the balance-sheet for the date of the expiration of the six months period shows that the entire surplus and undivided profits of the corporation are represented by assets pertaining directly to the business, such as plant, equipment, inventories, and accounts receivable, with only such amount represented by cash and by salable securities as is reasonably necessary for working capital or other established business requirements, the inference would seem warranted that the undistributed net income for the taxable year has been employed either for an increase in assets needed for the business or for a reduction of the business liabilities.

It is therefore suggested that corporations unable to establish through tracing into particular assets or into the decrease of particular liabilities the use of undistributed net income for employment in the business may submit a comparative balance-sheet showing in reasonable detail the assets and liabilities of the corporation as at the opening and the close of the taxable year and as at the close of the six months period.

3. *Net income of a corporation during the six months period.*—If resort is made to the balance-sheet in the effort to show the employment in the business of all undistributed net income of the taxable year or its retention for the reasonable requirements of the business, the net income for the six months after the taxable year is necessarily to be taken into account and it must be shown that the undistributed net income of the taxable year as well as the undistributed net income of the six months is so employed or retained.

4. *Distribution of current earnings designated for particular investments.*—Paragraph 12 of T. D. 2736, referring to the statement that corporations may designate from what earnings an investment is made, is not to be taken as in any manner altering the rule relative to the order in which earnings are to be treated as distributed as dividends under the provisions of section 31 (b) of the act of September 8, 1916, added by section 1210 of the act of October 3, 1917. It is there specified that any distribution made to shareholders shall be deemed to have been made from the most recently accumulated undivided profits or surplus. The application of this provision is dealt with in T. D. 2659 and T. D. 2678. While a corporation retains profits without distribution of dividends, it may retain them in such form as it may elect, but when it makes any distribution of dividends the distribution must be treated as made from the most recent profits or surplus regardless of any previous designation of any portion of such earnings for investment purposes. The designation of an investment in obligations of the United States issued subsequent to September 1, 1917, may serve to prevent the application of the additional tax of 10 per cent to the amount so invested, but it does not warrant the disregarding of the amount of net income for the taxable year so invested in determining the profits or surplus from which any dividends may be distributed.

Students' Department

EDITED BY SEYMOUR WALTON, C.P.A.
(ASSISTED BY H. A. FINNEY, C.P.A.)

SURPLUS ADJUSTMENT.

In the interests of proper statistics it is imperative that the profits and losses or expenses of different years should be allocated to the years in which they accrued. The object of keeping accurate accounts is the ascertaining of the exact facts in regard to the course of a business, so that a comparison between different years will show in as great detail as possible the variations in cost of goods sold, in selling expense and in general or administrative expense, and the consequent rise or fall of the rate of profit.

There is no possible reason for ascertaining the cost of the goods sold, for instance, unless the percentage of that cost to the net sales is ascertained and compared with the corresponding percentages of previous years. It is necessary to go further than that, because the cost of the goods is made up of several important elements—materials, labor and the various items of factory burden or overhead. If a percentage of the total cost is the only one used, important information may be overlooked. Material may have increased in price, and labor may have cost an approximately equal amount less, owing to the introduction of labor-saving machines. The total cost will not be affected, but the important variations in material and labor will be overlooked.

It is therefore important that the percentages of the different elements of cost to the total cost should be known, as well as the percentage of the total cost to sales. It is equally important that all the elements of the cost should be accurately stated in regard to the costs of each separate year.

The effect on comparative annual profits caused by a disregard of this principle may be shown by a simple illustration.

Suppose that the books as closed showed a net profit of $40,000 one year, and $35,000 the next year. There is a decrease of $5,000 in the apparent profits, although all the conditions pointed to a probable increase. Investigation discloses an error of $10,000 in the addition of the inventory of the first year, overvaluing it by that amount. The ending inventory of the second year is found to be correct.

An overvaluation of the closing inventory of a period decreases the cost of the goods sold and therefore increases the gross and net profits of the period. An overvaluation of the inventory at the beginning of a period has the opposite effect, increasing the cost of the goods sold and decreasing the gross and net profits. The result of the error in the supposed case therefore is an overstatement of $10,000 in the profits of the first year, and an equal understatement of the profits of the second year. The true profits of the first year were $30,000 and those of the second

year were $45,000—an increase of $15,000, instead of a decrease of $5,000. It is therefore plain that the error of $10,000 doubles itself into a difference of $20,000 in the comparative results.

It is a common practice of bookkeepers to correct such errors, when discovered in time, by making entries to the debit or credit of profit and loss. In the case in point such bookkeepers would have credited inventory and charged profit and loss if the error had been discovered before the books had been closed the second time, and would have made no entry at all if the error had not been discovered until after the second closing. As long as the final result is not affected, they ignore the results of the separate years.

The function of the profit and loss account is the recording of the results of a business for the current year only. It is an error to make any entry in it that does not apply to the year for which the profits are being ascertained.

Any errors, intentional, unintentional or unavoidable, which have affected the profits of any year prior to the current one have also affected the surplus, into which the erroneous results have been carried. Corrections of these errors must therefore be made in the surplus account. When there are many corrections it is better to open an account with surplus adjustments. When all the corrections have been made, the net balance of the account is carried to the debit or credit of the surplus account. In stating the results of the current year the final table dealing with surplus is begun with balance brought from previous year, the amount transferred from surplus adjustment account is credited or debited, and a new balance is brought down as "true balance from previous year," before the results of the transactions of the current year are entered.

This treatment will ensure a correct statement for the current year, subject to any adjustments that may afterwards be found necessary. It does not affect the details of the profit and loss entries of the previous year or years. In order to arrive at the actual figures that should have appeared in the past, it is necessary to recast the profit and loss statement for the year affected. This could be done by reversing all the entries as made and by transferring to the different accounts the entries affecting them from surplus adjustment, and then by closing the books again with the corrected figures. This would seldom be worth while. If the annual revenue statement is spread on the journal, enough space should be left for the corrected statement, when all the adjustments have been made. If a statistical book is kept, the corrected statement, including all the corrected details and the corrected percentages should be entered in that book. In making comparative statements for a number of years the corrected figures should be used, not only as to total final results, but also as to details. In the supposed case, if the error had been in the inventory of raw material, not only would the cost of goods sold have been affected, but also the constituent element of that cost, the amount of material used.

If the correction of profits extends over two or more years, it will be necessary to discriminate between errors that permanently affect the sur-

plus and those which affect only the profits of the respective years, but by being offset in the next succeeding year do not affect the final balance of the surplus account.

If the examination is for the purpose of adjusting the profits and surplus for two years, it is first necessary to adjust the surplus at the beginning. If there are discovered any bad debts that were not then considered, and have not since been taken account of, the credit to accounts receivable and debit to surplus would represent, not only a correction of the surplus at that date, but also a permanent reduction of all subsequent balances of the surplus account.

If a disbursement that should have been charged to plant account for entirely new equipment purchased has been charged to repairs and replacements, the correcting entry of a debit to plant account and credit to surplus would represent a permanent increase in the surplus balance.

If an error has been made in the inventory which entered into the closing of the books, by virtue of which the inventory has been stated as larger than it really was, the correcting debit to surplus would have to be made in order to reach a proper balance in the surplus at the beginning. However, as the inventory disappears in the transactions of the succeeding year and is replaced by an entirely independent inventory at the close of that year, there is no permanent effect upon the surplus. As the excessive inventory was credited to profit and loss, and therefore to the surplus in the past year, it is charged to profit and loss, and therefore to surplus at the end of the next year at the same excessive amount. The excess credit to surplus one year is offset by the excess debit to surplus the next year, leaving the surplus balance the same as if no error had occurred. Therefore, the correcting debit to adjust the first surplus must be offset by a correcting credit to surplus the next year. No correction at all need be made if the object is merely to adjust the final surplus. The correction is made to ascertain the true profits of each year, one year's profits having been overstated and those of the other understated.

Any errors made in the last year under examination will affect the final surplus, but the offsetting corrections can now be made as at the end of the year, together with the entries correcting the permanent errors made in previous years. As the new year will then start with the correct figures, no further entries are necessary.

Mention has been made of three classes of errors: those which are intentional, unintentional and unavoidable. In the first class are those errors which are deliberately made in order to swell apparent profits, such as the overvaluation of inventories or the failure to set up reserves for depreciation or for bad debts.

Unintentional errors include mistakes in the addition of inventories or in the calculation of extensions, the omission of articles from inventories or the inclusion of the same articles twice.

Unavoidable errors are those made by overstating or understating an expense which has been incurred, but the exact amount of which is not yet known. If a concern sells all its goods f. o. b. destination, there are

always numerous shipments, that have not reached the customers when the books are closed, on which the freight can be approximated only. To cover this freight it is necessary to set up a reserve for freight according to the best estimate of its amount. When the actual freight on these goods is paid it is charged to this reserve. Any final balance in the reserve account must be transferred to surplus adjustment account and must not be allowed to affect the freight belonging to the current period.

The following problems and their solutions will illustrate the various phases of the subject.

Problem

You are requested to close the books of the Essex Manufacturing Co. of New York, as of December 31, 1913. They were last closed by the former bookkeeper on December 31, 1912. Upon investigation you find that certain expenses are prepaid or accrued, as the case may be, and that the former bookkeeper disregarded such items entirely when closing the books. You also find certain errors as described hereafter. Submit adjusting journal entries in skeleton form.

	12/31/12	12/31/13
Taxes accrued	$1,200.00	$1,406.00
Interest accrued on notes receivable	141.50	106.20
Interest on mortgage payable	360.00	360.00
Stable supplies on hand	56.00	83.00
Fuel on hand	462.00	370.00
Oil, waste and grease on hand	97.00	132.00
Factory supplies on hand	218.00	218.00

A few days before you were engaged, an error was discovered showing that the inventory of raw materials as of December 31, 1912, should have been $2,700 greater. An investigation into the reason for this error's not having been found, when the extensions and footings were checked, disclosed the fact that the extensions and footings of the inventories were not verified. This work was immediately ordered to be done and as a result an error in the footing of one sheet showed the inventory of finished goods to be $4,000 too much. An error was also found in the extension of one item of goods in process showing the inventory to be $1,000 too small. These errors have not been adjusted.

J. S. Clarke & Co.'s account was charged off to reserve for bad accounts in 1912. On September 16, 1913, $86 (one-fourth of the amount charged off) was received and accepted in full settlement of the amount due. The bookkeeper credited this amount to profit and loss.

Solution

Surplus adjustment	$1,560.00	
Taxes accrued 12/31/12		$1,200.00
Interest accrued 12/31/12 on mortgage		360.00
Items omitted at Dec. 31/12		

Surplus adjustment	300.00	
Raw material inventory, omitted	2,700.00	
Goods in process, error extension	1,000.00	
Finished goods, error addition		4,000.00
To correct inventories of 12/31/12		
Interest accrued on notes receivable	141.50	
Surplus adjustment		141.50
Omitted 12/31/12		
Stable supplies	56.00	
Fuel	462.00	
Oil, waste and grease	97.00	
Factory supplies	218.00	
Surplus adjustment		833.00
Items omitted 12/31/12		
Profit and loss	86.00	
Surplus adjustment		86.00
Salvage on J. S. Clarke & Co. credited to profit and loss in error		
Surplus	799.50	
Surplus adjustment		799.50
Closing out adjustment entries.		

NOTE: After making these entries in detail in the surplus adjustment account, and transferring the balance to surplus, the new surplus balance is used in the statement for the current year, with the notation that it is an adjusted balance.

In the closing entries for the current year would be the following

Taxes accrued December 31, 1913	$1,406.00	
Interest on mortgage payable, accrued at date	360.00	
Accrued accounts payable		$1,766.00
Accrued accounts receivable	106.20	
Interest		106.20
For accrued interest on notes receivable		
Stable supplies inventory	83.00	
Fuel inventory	370.00	
Oil, waste and grease inventory	132.00	
Factory supplies inventory	218.00	
Stable supplies		83.00
Fuel		370.00
Oil, waste and grease		132.00
Factory supplies		218.00
To bring inventories into the above operating accounts before closing.		

Problem

You are asked to submit a statement of the profits of a company for the two years ending December 31, 1917. No dividends have been paid in recent years, and the surplus balance at December 31, 1917, according to the books, amounts to $421,000.00, comprising:

Balance December 31, 1915	$189,000.00
Profits for 1916	92,000.00
Profits for 1917	140,000.00
	$421,000.00

As a result of your audit the following matters require consideration as at the respective dates:

January 1, 1916:

Bad debts amount to $12,000.00, for which there is no provision in the books.

Consigned goods (own) are included in the inventory at $120,000.00, which are priced at 20% in excess of cost.

The following liabilities are omitted from the books:

New construction	$25,000.00
Material included in inventory	3,000.00
Wages	2,400.00
Accrued taxes	1,700.00

December 31, 1916:

Bad debts amount to $9,000.00 not provided for.

Consigned goods (own) amount to $180,000.00, which are valued at 20% in excess of cost.

Liabilities omitted from the books:

Goods on hand omitted from inventory	$8,000.00
Accrued taxes	2,100.00

Plant additions, amounting to $9,000.00, have been erroneously charged to profit and loss.

The inventory is found to be overstated by $14,300.00 because of an error in recapitulation.

No provision for depreciation was made on the books, and your calculations show that $5,000.00 should be provided.

December 31, 1917:

Bad debts amount to $11,000.00, for which no reserve is carried.

Consigned goods (own) amount to $156,000.00, being valued at 30% in excess of cost.

Liabilities omitted from the books:

For purchase of new machinery	$12,000.00
Accrued wages	3,200.00
Accrued taxes	2,700.00

No provision was made in the books for depreciation—you compute it at $7,000.00.

The profits for the year include a credit of $8,000.00 in respect of the settlement of a lawsuit arising from transactions of the year 1914.

Prepare a reconciliation of the surplus at January 1, 1916, and profits of the respective years as shown by the books with the adjusted figures as shown by the audited statement.

Prepare whatever journal entries are necessary to correct the books at December 31, 1917.

Statement of Adjustments in Surplus and Profits and Loss
January 1, 1916, to December 31, 1917

		Surplus at Dec. 31, 1915		Profit & loss in 1916		Profit & loss in 1917	
Balances as stated			189,000		92,000		140,000
Adjustments at Jan. 1, 1916							
Bad debts	(a)	12,000					
Consignments	(b)	20,000			20,000		
Liabilities omitted							
New construction	(c)	0					
Material inventoried	(d)	3,000			3,000		
Wages accrued	(e)	2,400			2,400		
Taxes accrued	(f)	1,700			1,700		
December 31, 1916							
Bad debts	(a)			9,000			
Consignments	(b)			30,000			30,000
Liabilities omitted							
Goods not in inventory	(c)			0			
Taxes accrued	(f)			2,100			2,100
Plant addition	(g)				9,000		
Inventory over	(b)				14,300		14.300
Depreciation	(h)				5,000		
December 31, 1917							
Bad debts	(a)					11,000	
Consignments	(b)					36,000	
Liabilities omitted							
Machinery	(c)					0	
Wages accrued	(e)					3,200	
Taxes accrued	(f)					2,700	
Depreciation	(h)					7,000	
Suit settled			8,000			8,000	
Adjusted balances		157,900		67,700		118,500	
		197,000	197,000	128,100	128,100	186,400	186,400

a. Credit accounts receivable. b. Credit inventory. c. No entry—affects assets and liabilities, but not surplus. d. Credit accounts payable. e. Credit accrued wages. f. Credit accrued taxes. g. Debit plant. h. Credit reserve.

The following journal entries would be necessary to record the adjustments the accountant should make. An adjustment account is opened with each year for the sake of the record, and for that reason also the items of each year should be posted to it in detail. Explanations of the entries are omitted to save space, as they are obvious.

Surplus adjustment, 1915	39,100	
Accounts receivable, for bad debts		12,000
Inventory 1915, for consignments error		20,000
Accounts payable 1915, material in inventory		3,000
Wages accrued 1915		2,400
Taxes accrued 1915		1,700
Equity in lawsuit	8,000	
Surplus adjustment 1915		8,000
Surplus adjustment, 1916	60,400	
Accounts receivable for bad debts		9,000
Inventory 1916, for consignment error		30,000
Accrued taxes 1916		2,100
Inventory 1916, overstated		14,300
Reserve for depreciation		5,000
Inventory 1915, for offset	20,000	
Accounts payable 1915, for offset	3,000	
Wages accrued 1915, for offset	2,400	
Taxes accrued 1915, for offset	1,700	
Plant	9,000	
Surplus adjustment 1916		36,100
Surplus adjustment 1917	67,900	
Accounts receivable for bad debts		11,000
Inventory 1917, consignment error		36,000
Wages accrued		3,200
Taxes accrued		2,700
Reserve for depreciation		7,000
Equity in lawsuit, entered as of 1915		8,000
Inventory 1916, offset	30,000	
Accrued taxes 1916, offset	2,100	
Inventory 1916, offset	14,300	
Surplus adjustment 1917		46,400
Surplus	76,900	
Surplus adjustment 1915		31,100
Surplus adjustment 1916		24,300
Surplus adjustment 1917		21,500
The surplus as per books was	421,000	
Charging the above adjustments	76,900	
True surplus December 31, 1917	344,100	

Note. In regard to the charges of $12,000 and $9,000 for bad debts in 1915 and 1916 respectively, it is assumed that the phrase, "for which there is no provision in the books," means that these accounts receivable

are still on the books, and does not mean that no provision was made for them in the respective years, but that they might have been charged off subsequently.

The liabilities omitted each year do not affect the profits or the surplus, when they were incurred for actual property not yet included among the assets. Therefore no attention is paid to the item of new construction in 1915 of goods not inventoried in 1916 and of machinery in 1917. The omission of the latter item, however, understates the liabilities in the final balance-sheet, and an entry should be made

Machinery	12,000	
Accounts payable		12,000

Bonds and Sinking Funds

Editor, Students' Department:

Sir:—Will you kindly give me the correct entries for the following transactions?

A company issues bonds for the construction of a plant, placing the bonds in the hands of a trust company as trustee. The entry for the issue of bonds would be as follows:

Entry No. 1.

Trust Co.—trustee—bond account.
First mortgage 5% gold bonds
Entry to record the issue under date of
————of————face value of
this company's first mortgage 5% gold bonds.

The company now sells some of the bonds to the construction company for work performed. The entry would be as follows:

Entry No. 2.

Construction Co.—purchase account
Discount on bonds
To Trust Co. trustee—bond account
Unearned interest on 1st mortgage bonds
Entry to record the sale to construction
company under date of————of————
face value of bonds issued and certified by
trustee as noted in entry No. J. V. No.————
at 80% of their face value and accrued interest.

A provision of the mortgage states that the company is to establish a sinking fund for the retirement of the bonds at maturity. The company complies with this provision and re-purchases some of the bonds at 87, whereupon the company makes the following entry upon its books:

Trust Co. trustee—sinking fund investments
Accrued interest on sinking fund investments
To Trust Co., trustee, sinking fund deposits
Profit realized by purchase of company's
5% gold bonds.
Entry to record the purchase by the company
of————face value of the company's 1st
mortgage 5% gold bonds at 87% of their face
value and accrued interest.

I claim this entry is incorrect, and that the profit the company claims should be credited to discount on bonds.

Discount on bonds is to be amortized at an amount decided by the board of directors.

If you will indicate the correct entries for these transactions it will be a favor greatly appreciated.

Yours truly,

C. J. S.

If the issue of bonds referred to consisted of $250,000.00 par value, maturing in 20 years, bearing interest at the râte of 5 per cent, there are two things to be determined: the amount of the annual deposit in the sinking fund and the effect of the discount on the bonds issued and on those purchased upon the profit and loss and surplus entries each year.

It will be noted that nothing is said about the effect of the discount on the sinking fund itself. Theoretically there would be no effect, because the requirements of the sinking fund demand that a certain amount of securities earning 5 per cent per annum be added to it each year. This necessarily means that the deposit should be the required amount, not in money but in bonds bearing 5 per cent. Otherwise the deposit will be more than the required amount if bonds are bought at a discount and less than the required amount if the bonds command a premium. A concrete example will show this.

If the required annual deposit is $7,500.00, to be invested together with all interest collected, the deposit of that amount of cash and the purchase of 5 per cent bonds at 87 would mean the purchase of $8,500.00 and uninvested cash of $105.00. This is equivalent to the investment of the $7,500.00 at over 6 per cent, and if subsequent deposits were also invested in bonds at a larger or smaller discount, the sinking fund would equal the face of the bonds long before maturity. On the other hand, if the bonds commanded a premium of 5 per cent, $7,500.00 cash would purchase only $7,000.00 with a cash remainder of $150.00 and the return would be only 4.6 per cent. The result would be that the sinking fund would not equal the face of the bonds at their maturity, and the requirements of the trust deed would not have been met.

As the company must provide a sinking fund that will equal the total of the bonds at maturity, but is not obliged to do any more, it follows that the required deposit is the face of the 5 per cent bonds bought. Any saving from buying the bonds at a discount, or loss from paying a premium for them is a general profit or loss of the business and does not affect the face value of the bonds that must be put into the sinking fund each year.

This being understood, the next question concerns the amount of bonds to be bought each year. In most interest books there is a table which gives the necessary data, or if there is no sinking fund table, there is one which will show how much $1.00 per annum will amount to at compound interest for the required number of years. The total issue of bonds divided by the accumulated amount of $1.00 per annum will give the amount of annual deposit necessary to create a sinking fund that will exactly meet the bonds at maturity.

If a person does not have access to interest tables he can readily make the calculation himself. Starting with $1.00, he adds the interest at 5 per cent for one year, then adds another $1.00 for the contribution of the second year. The total of these three items then bears 5 per cent and another is added for the third year, and so on. The calculation is carried out six decimal points beyond the $1. so as to insure greater accuracy. Thus

First deposit	1.000000
Interest one year	.050000
Second deposit	1.000000
	2,050000
Interest one year	.102500
Third deposit	1.000000
	3.152500

* * * * * * * * * * *

At the end of the 18th year, the total is	29.539003
Deposit beginning 19th year	1.000000
	30.539003
Interest one year	1.526950
20th deposit	1.000000
	33.065953
Interest one year	1.653298
Total end of 20 years	34.719251

As the total issue of bonds is $250,000, the amount of annual deposit required would be found by dividing 250,000.00 by 34.719251. This gives $7,200.62.

To make sure of the figures it is best to prove them by showing their operations, thus:

First deposit	7,200.62
Interest one year	360.03
Second deposit	7,200.62
	14,761.27
Interest one year	738.06
Third deposit	7,200.62
	22,699.95

If this is continued until 20 deposits are made and 20 interest items added, the total will amount to $250,000.00, or so near it as to be practically the same.

The above calculations are all based on the hypothesis that the first deposit is made at the beginning of the first year. Practically this would never be done. The first deposit would be made at the end of the first, the second deposit at the end of the second year, and so on, until the twentieth deposit is made at the end of the twentieth. As the bonds run 20 years, they are then due; therefore there is no interest earned after

the 20th deposit is made. In making the table of $1.00, therefore, 20 deposits of $1.00 but only 19 interest calculations must be included. Leaving off the last item of interest in our tabulation of $1.00, we have 33.065953 as the amount of 20 deposits and 19 items of interest. Dividing $250,000.00 by 33.065953 gives $7,560.65 as the required annual deposit.

The net procedure to be determined is the treatment of the discount on the bonds. When the bonds were originally issued at 80 at 5 per cent for 20 years, it means that the effective rate of interest was nearly 6⅞ per cent. Not only was the original principal of which the company had the use $200,000 and not $250,000, but in addition the discount of $50,000 must be taken up during the 20 years. If no bond table is available, the effective rate may be found by the "cut and try" method. Making the calculation at 7 per cent that rate is found to be too large. A rate of 6¾ proves too small, while 6⅞ is found to be a trifle too large, but as near as possible unless a rate is used that extends to several decimals. The calculation is as follows:

Original effective principal		200,000.00
Interest at 6⅞%	13,750.00	
Less coupons paid, 5% on $250,000	12,500.00	1,250.00
		201,250.00
Interest on $201,250.00 @ 6⅞%	13,835.94	
Less coupons paid	12,500.00	1,335.94
		202,585.94

and so on for 20 years.

The last column does not represent any one account on the books, but is the net of the credit account of bonds, $250,000.00, which remains constant, and the diminishing debit balance of discount on bonds, as the latter account is credited each year with the difference between the effective interest and the interest actually paid by the coupons.

If there are no complications the entry at the end of each year will be

Bond interest	1,250.00	
To discount on bonds		1,250.00

the amount each year being changed to $1,335.94 at the second year and to the corresponding amount subsequently.

The debit is to bond interest, since the discount is paid in lieu of interest each year. If the bonds had been issued to bear 7 per cent they would have sold at par and it would have been necessary to issue only $200,000 of them. The discount of 20 per cent therefore represents the 2 per cent annual interest saved. It is a commutation of that much interest and is therefore interest paid in advance.

Buying bonds at 87 for the sinking fund introduces a complication in the treatment of the discount. The annual contribution to the fund, $7,560.65, cannot all be made in bonds. Since bonds are seldom issued for less than $500 each, $7,500 face value of bonds would be bought, and $60.65 would be left in cash in the hands of the trustee. Bonds for $7,500 bought

at 87 would cost $6,525.00, the discount of 13 per cent being $975.00. This is a clear gain, and as it is a gain of discount it is a credit to discount on bonds. The entry would be,

Sinking fund bonds	7,500.00	
To cash		6,525.00
Discount on bonds		975.00

The entry charging bond interest would now be changed to read

Bond interest	275.00	
To discount on bonds		275.00
To bring discount on bonds to the proper amount.		

The amortization of the discount requires that no more than $1,250.00 be credited the first year. If both the $1,250.00 and the $975.00 are credited, the discount will not work out properly at the end.

If the sinking fund bonds are bought on a coupon date, there will be no accrued interest. If the purchase is made some days later there will be a smaller amount of interest accrued. This will be paid out of the $60.65 uninvested money and charged to sinking fund interest. It will be reimbursed when the first coupons are collected and are credited to sinking fund interest.

Legal Fees During and After Construction

Editor, Students' Department:

Sir:—With a company that has constructed a dam across a river, it has been necessary to retain a large legal force to handle damage suits coming up from claims that the reservoir and back water have damaged property around them. The plant has been operating over four years, and we are continuing to charge the monthly retainer to an account "Legal expense during construction." While I know that the handling of these claims originally is a just charge to capital, there is a doubt in my mind as to how long such a charge should be made, and I will thank you for your opinion on the matter.

Assuring you that this question is of vital interest to me, and that an opinion from you will be highly appreciated, I am

Your student,

F.

I understand that the "monthly retainer" is for legal expenses connected with claims for damages caused by the construction of the dam.

All the expenses, legal or otherwise, necessitated by the construction of the dam are part of the cost of the work. If all the legal expense had been paid before the dam was finished there would have been no doubt as to this. The fact that payment was delayed does not alter the situation.

If any of the legal services are rendered on account of actions connected with the operations since the dam was completed, a proper proportion of the payments should be charged against operations.

Correspondence

Theory and Practice

Editor, The Journal of Accountancy:

SIR:—I do not expect that the more experienced accountants will be benefited much by perusing this article but I do hope that students and beginners will learn something that will add to their knowledge.

CONSOLIDATED BALANCE-SHEETS

The theory of consolidated balance-sheets is well established and needs no further discussion. Mistakes easily can be made in their preparation and constant care should be exerted to avoid them. In solutions of the following problem, given in the Illinois, 1913, examination, I think, Professor A. E. Andersen, Mr. H. A. Finney, Mr. David Himmelblau and Mr. Seymour Walton show the combined goodwill at $1,530,000. The date of the write-up of the S. B. investment by the L. W. Co. determines whether the combined goodwill is $1,530,000 or $1,630,000. Professor Andersen says that he assumed that the write-up occurred after Jan. 1, 1912. Mr. Finney says that the time does not matter. Mr. Walton ignores the time and makes a grave mistake in the application of the $100,000 dividend from the L. W. Co. on the books of the parent company.

PROBLEM

From the following three trial balances prepare a consolidated balance-sheet as at December 31, 1912, in the form you would draw it up for presentation to the stockholders of the parent company (the Safety Razor Company) showing as separate items therein (a) the total goodwill of the combined companies; and (b) the net profits accruing to the new corporation, viz., to the Safety Razor Company.

Safety Razor Company

Trial Balance at December 31, 1912

Preferred stock		$1,500,000.00
Common stock		1,500,000.00
Investments in subsidiary companies—4,000 shares of stock of L. W. Co. and 4,000 shares of stock of Steel Blade Co., both of $100.00 each at cost	2,500,000.00	
Accounts payable		20,000.00
Dividends from subsidiary companies		100,000.00
Administration expenses	25,000.00	
L. W. Co. current account	100,000.00	
Steel Blade Company advances	150,000.00	
Cash	270,000.00	
Organization expenses	75,000.00	
	$3,120,000.00	$3,120,000.00

L. W. Company

Trial Balance at December 31, 1912

Properties and plant	325,000.00	
Goodwill	250,000.00	
Investment in Steel Blade Co.—2,000 shares of a par value of $100 each cost $300,000.00	400,000.00	
Inventories	250,000.00	
Receivables	195,000.00	
Cash	90,000.00	
Capital stock (4,000 shares)		400,000.00
Accounts payable		125,000.00
Steel Blade Company		175,000.00
Surplus (includes $100,000.00 added to book value of investment in Steel Blade Co.)		710,000.00
Safety Razor Co.		100,000.00
	$1,510,000.00	$1,510,000.00

Steel Blade Company

Trial Balance at December 31, 1912

Goodwill	$50,000.00	
Property and plant	325,000.00	
Inventories	190,000.00	
Receivables, general	105,000.00	
L. W. Company	195,000.00	
Cash	10,000.00	
Capital stock (6,000 shares)		$600,000.00
Accounts payable		90,000.00
Safety Razor Company		150,000.00
Surplus or deficit		35,000.00
	$875,000.00	$875,000.00

In the preparation of your consolidated balance-sheet be guided by the following assumed facts:

1. That the Safety Razor Co. was formed on March 28, 1912, and acquired its stock ownership in the two subsidiary companies, as shown in its trial balance on April 1, 1912.

2. That at January 1, 1912, the L. W. Company had a surplus of $605,000.00 and the Steel Blade Company a deficit of $50,000.00.

3. That no inventory was taken of either the L. W. Company of the Steel Blade between January 1 and December 31, 1912, the business of the companies being continued without interruption notwithstanding the change in ownership of the capital stock as indicated above.

4. That prior to December 31, 1912, the L. W. Company declared a dividend of $100,000.00 payable to the parent company which was duly taken up on the books of both companies, being passed through the current accounts and charged against the surplus of the L. W. Company prior to December 31, 1912.

5. That the differences in the current accounts between the Steel Blade Company and the L. W. Company represents as to $10,000.00 merchandise in transit, and as to the remaining $10,000.00 a charge for rental of warehouse for the last six months of 1912, which has been credited to the rent account on the books of the Steel Blade Company.

6. That it is estimated on reliable authority which may be accepted as final that from January 1, to March 31, 1912, the net profits of the L. W. Company amounted to $30,000.00 while during the same period the Steel Blade Company lost $15,000.00.

Attach your consolidating working papers to the consolidated balance-sheet you prepare.

* * * * * * * * * *

As the problem does not say when the write-up occurred we have to use our imagination. It does say that at Jan. 1, 1912, the L. W. surplus was $605,000 and that the net profits to March 31, 1912, were $30,000. Isn't it against reason that L. W. wrote up the investment between January 1 and March 31, 1912, in the face of S. B. Company's loss of $15,000 during that period? Certainly L. W. could have gained nothing, because only $30,000 profits were recognized. It appears to me that the only logical assumption is that the write-up occurred prior to Jan. 1, 1912, and is included in L. W. Company's Jan. 1, 1912, surplus of $605,000. Any solution of this problem should state the assumed time of the write-up. Assuming that it occurred prior to Jan. 1, 1912, the parent company acquired as at March 31, 1912.

	L. W. Co.	S. B. Co.
Capital stock	$400,000	$600,000
Surplus	635,000	
Deficit		65,000
Total	$1,035,000	$535,000

The nature of the assets would be shown by this tabulation.

	L. W.	S. B.	Inter-company elimination	Combined
Goodwill	$250,000	50,000		$300,000
S. B. investment	400,000		400,000	
Other assets	385,000	485,000		870,000
Total	$1,035,000	$535,000	$400,000	$1,170,000

The parent company paid $2,500,000, so it acquired additional goodwill of $1,330,000, making the total goodwill $1,630,000.

Mr. Walton shows a goodwill of $1,530,000, so he is estopped from claiming that he assumed that the write-up occurred prior to Jan. 1, 1912. And then he makes a grave mistake. On the books of the Safety Razor Company (the parent company) he credits the $100,000 dividend from the

L. W. Company to surplus. He accepted the Jan. 1, 1912, surplus of $605,000 as real; so he had to assume that the write-up occurred after Jan. 1, 1912. A simple tabulation will show that upon this basis between April 1 and Dec. 31, 1912, L. W. Company made profits of only $65,000.

L. W. Co.	
Surplus, Dec. 31, 1912,	$710,000
Deduct write-up	100,000
Adjusted surplus	$610,000
Deduct rental	10,000
	$600,000
Add dividend paid	100,000
	$700,000
Deduct surplus at March 31, 1912	635,000
Net profits April 1 to Dec. 31, 1912,	$65,000

Therefore on the books of the parent company only $65,000 of the dividend would be credited to surplus; $35,000 would be credited to the $2,500,000 investment account. To credit the whole $100,000 as profits and to claim goodwill of only $1,530,000 is a contradiction.

Unrealized Profits

It is well known that unrealized profits should not be carried into profit and loss account, but in practice do accountants always perceive the unrealized profit? The following problem offers an excellent illustration of unrealized profits that were considered as earned. Undoubtedly the problem was originated for the sole purpose of testing the candidate's knowledge of adventure accounts and I hazard the guess that the originator had no idea that it raises the question of unrealized profits.

Problem

Two merchants, C. F. Munton and W. A. Spencer, agree to share equally in a joint adventure in trade to the West Indies.

On March 1, 1907, they charter a small vessel and purchase and ship materials which cost them $197.00, for which Munton gives his cheque.

This cargo they consign to John Smith, their agent at Havana, which he disposes of, and in return ships on board the same vessel 4,000 cases of commodity A and 100 cases of commodity B; and he draws on Munton at sight for $125.00, this being the amount of the agent's charges and disbursements over and above the net proceeds of the cargo consigned to him. Munton accepts and pays the bill. On April 1st, the vessel arrives, whereupon Munton pays sundry charges of $337.50. Spencer pays the freight, amounting to $493.00. On April 4th Munton sells 1,000 cases of commodity A to Henry Chamberlain for $239.58, and collects $150.00, and on April 10th Spencer collects the rest.

About this time Mr. Spencer happens to have occasion for 1,400 cases of commodity A, which he takes on April 14th, and with Munton's consent values at $291.66. He also takes 10 cases of commodity B, valued at $47.50. Munton sells the other 1,600 cases of commodity A on April 20th to John Walters for $383.33, and a month after accepts $382.50 in full payment.

Mr. Munton next sells on April 25th the other 90 cases of commodity B in barter for 30 cases of commodity C, which he and Spencer divide equally between them.

The goods being thus disposed of, Munton presents his bill of charges, which comes to $22.66, and desires to have accounts stated between Mr. Spencer and him.

You are required to give the ledger accounts of the joint adventure, recording the foregoing transactions as follows:

Joint adventure account,
C. F. Munton
W. A. Spencer
Henry Chamberlain
John Walters

and also W. A. Spencer's account in C. F. Munton's ledger, showing his joint adventure with W. A. Spencer.

*   *   *   *   *   *   *   *   *   *

As we are considering only the profits it is sufficient to show only the

JOINT ADVENTURE ACCOUNT.

(W. A. Spencer and C. F. Munton)

Material	$197.00	Chamberlain	$239.58
Draft	125.00	Spencer	339.16
Sundries	337.50	Walters	383.33
Freight	493.00	Spencer	213.75
Discount	.83	Munton	213.75
Munton's charges	22.66		
Spencer, ½ profit	106.79		
Munton, ½ profit	106.79		
	$1,389.57		$1,389.57

No particular knowledge is required to arrive at the above result and any good bookkeeper ought to be able to solve the problem down to this point. The accountant should perceive the actual facts and point out that while Spencer took 1400 cases of commodity A at about three cents per case less than Chamberlain and Walters paid for it, it is hardly probable that he got it at cost. Spencer also took 10 cases of commodity B, valued at $47.50. Then the 30 cases of commodity C apparently were valued at $427.50, but we do not know if this is the original cost or the market value, and we do not know if to Spencer and Munton commodity C is raw material or finished product.

Spencer should have taken the goods at or near market value, and very likely he did; but if he did not Munton does not make a profit on the goods he takes, and Spencer does not make a profit on the goods Munton takes, and Munton sacrifices profits on all goods taken by Spencer in excess of his own takings of similar goods.

If the goods were taken at market value, Spencer is crediting profits on goods taken by himself, and Munton is crediting profits on goods he took, and the goods taken by each are valued at the market price on the books of each, and the anticipated profits on those goods are included in the $106.79 credited by each as their net profits.

If to Spencer and Munton the goods are raw materials the supposed profits would be considered as profits only for adventure statistics, and should be treated as a reduction of the cost of the material.

The question of unrealized profits is the most important part of the problem and a solution without a discussion of it ought not to be considered correct.

Cemetery and Land Accounts

No doubt it is well known that the property set aside by cemetery and land companies for parks, streets, garden houses, stations, etc., should be charged to general property account, but I do not know of anyone saying what eventually is to be done with it. When about all of the lots have been sold it will be found that the general property cannot be realized. To provide for this eventuality the general property should be recognized as a wasting asset and as each lot is sold general property reserve credited with an equitable portion.

Contractors' Accounts

It is well settled that the only safe method is to carry all contracts at cost until completed and accepted and that no profit should be taken in the meantime. However, if at the closing period the contractors insist upon crediting the pro rata profits and all reasonable contingencies have been provided for, I don't see how the accountant can refuse to assent but he must clearly state them as pro rata profits.

If a withdrawing partner demands his share of the pro rata profits and it is decided to pay him, then, while the pro rata profits are figured on the cost up to that time, it is well to point out that if material on hand is not considered, the settlement probably will be inequitable. If material was purchased shortly before the partner withdrew, and is not paid for and is unused, it would certainly seem unjust to the remaining partners for the withdrawing partner to receive profits on its cost. On the other hand if the material had been purchased a long time and had been paid for it would seem unjust to the withdrawing partner not to allow him profits on its cost. The accountant should perceive all the possibilities and explain them to the partners and request instructions.

If in addition to work by the contractor's own force, a sub-contract has been let and payments thereupon made on a percentage basis I think the accounts are best presented on the balance-sheet in this manner:

(Credit)

Blank contract		$100,000
Actual cost to date	$62,000	
Contingent liability upon sub-contract	8,000	70,000
		$30,000
Sub-contractor Smith—		
Percentage retained	2,000	
Contingent liability	8,000	10,000
		$40,000

If pro rata profits are paid to a withdrawing partner the amount should appear as a deduction from the contract, not because the liability thereupon is diminished but because the expected profits being included in the contract price that amount had been distributed.

Club Initiation Fees

Authorities tell us that membership fees and initiation fees are a source of profit to a club, but are not usually considered operating profits. Mr. Seymour Walton goes so far as to say that if a club is sufficiently prosperous to afford it they should not be credited to profits at all but should be considered capital receipts which should be used to pay for the club property or to redeem bonds. He apparently says that the financial condition determines the accounting treatment, but of course he does not mean that. Undoubtedly he will agree that the purpose of the fee determines the treatment. If for the purpose of obtaining money with which to purchase club property, or to retire indebtedness, or to create a reserve, or for other particular purposes, the fees are not operating profits in any sense but are donated surplus. I see no reason at all why the fees do not become operating profits after the particular purpose has been achieved. If property were purchased the repairs, renewals and depreciation would be operating charges and the fees should be treated as operating income to offset those charges.

If in the administration of the affairs of a club and the conservation of its finances, the governors do not anticipate all reasonable expenses and provide for income enough to defray them we can well let the financial condition influence us in determining the purpose of the fees. If the condition is strong we can argue that the dues and other income were expected to provide for all operating expenses and that the fees were for some particular purpose. If it is weak we can argue that it was planned that the fees were to be considered operating income. But it is easily possible for the financial condition to indicate one treatment and the known purpose demand the other. If the governors did plan for such income and included the fees in the estimate the fees are operating income. If they did not include the fees the fees are surplus donated for some particular purpose.

Mr. Walton incorrectly uses the term "capital receipts." Mr. H. C. Bentley correctly defines capital receipts as being money or other evidences of value which are caused by the creation of or addition to fixed liabilities, or the reduction of or realization on fixed assets. Initiation fees are not capital receipts—they are either profits or donated surplus.

Yours truly,

JOSEPH ROBINSON.

V. Marvin Womack and James R. Harper announce the formation of a partnership under the title of Womack & Harper, 1516 Hurt building, Atlanta, Georgia.

It is announced that the firm of Whittlesey, Myer & Wythes has been discontinued. Willis S. Whittlesey and H. A. Wythes continue practice under the firm name of Whittlesey & Wythes at 30 Church Street, New York, and George W. Myer will continue practice at 60 Wall Street, New York.

Edward Clifton Smith announces the removal of his office to the Johnston building, 30 Broad Street, New York.

Rankin & McAlpine announce the removal of their offices to suite 805, American Exchange National Bank building, Dallas, Texas.

Arthur Young & Co. announce that on November 15, 1918, the following became partners in the firm: Charles Judson, Thomas H. Clarke and W. D. McGregor.

Francis Oakey announces the opening of an office at 61 Broadway under the firm name of Francis Oakey & Co.

Arthur Young & Co. announce that Frederick G. Colley has become a partner of the firm as of October 10, 1918.